Table S1.

Descriptive Statistics and Correlation Matrix for the Physiological Dysregulation Index and Individual Biomarker Variables at Baseline and Follow-Up.

	M (SD)	Phys dys (T1)	Phys dys (T2)	BP (T1)	BP (T2)	HR (T1)	HR (T2)	CRP (T1)	CRP (T2)	WB (T1)	WB (T2)	Trig (T1)	Trig (T2)	Chol ratio (T1)	Chol ratio (T2)	Gluc (T1)	Gluc (T2)	HbA1c (T1)
Physiological dysregulation (T1)	-.01 (0.98)	1.00																
Physiological dysregulation (T2)	.01 (1.02)	0.68	1.00															
Blood pressure (T1)	103.6 (12.1)	0.40	0.25	1.00														
Blood pressure (T2)	103.1 (12.3)	0.21	0.35	0.50	1.00													
Heart rate (T1)	67.2 (10.7)	0.46	0.27	0.09	0.07	1.00												
Heart rate (T2)	66.4 (10.6)	0.29	0.47	0.11	0.08	0.55	1.00											
C-reactive protein (T1)	0.68 (1.11)	0.55	0.41	0.11	0.08	0.17	0.14	1.00										
C-reactive protein (T2)	0.56 (1.10)	0.36	0.54	0.09	0.07	0.11	0.20	0.61	1.00									
White blood cells (T1)	6.46 (1.93)	0.52	0.39	0.08	0.05	0.18	0.11	0.29	0.22	1.00								
White blood cells (T2)	6.61 (2.02)	0.37	0.54	0.07	0.06	0.10	0.18	0.22	0.29	0.63	1.00							
Triglyceride level (T1)	1.79 (1.06)	0.62	0.41	0.10	0.06	0.13	0.07	0.15	0.11	0.19	0.15	1.00						
Triglyceride level (T2)	1.52 (0.84)	0.44	0.59	0.08	0.07	0.05	0.12	0.17	0.13	0.15	0.19	0.61	1.00					
Cholesterol ratio (T1)	3.80 (1.02)	0.54	0.38	0.07	0.07	0.04	0.02	0.20	0.12	0.14	0.11	0.56	0.40	1.00				
Cholesterol ratio (T2)	3.53 (1.09)	0.38	0.51	0.03	0.06	0.03	0.05	0.16	0.17	0.12	0.10	0.42	0.61	0.72	1.00			
Glucose (T1)	4.93 (1.03)	0.49	0.23	0.08	0.04	0.07	0.05	0.10	0.05	-0.02	0.04	0.09	0.10	0.03	-0.01	1.00		
Glucose (T2)	5.43 (1.03)	0.28	0.55	0.07	0.01	0.04	0.09	0.10	0.11	0.10	0.08	0.09	0.13	0.04	0.03	0.47	1.00	
HbA1c (T1)	40.83 (7.2)	0.50	0.41	0.04	-0.04	0.12	0.11	0.15	0.10	0.16	0.16	0.18	0.16	0.05	0.02	0.57	0.46	1.00
HbA1c (T2)	41.6 (8.23)	0.41	0.52	0.03	-0.03	0.12	0.13	0.14	0.15	0.14	0.18	0.17	0.20	0.04	0.04	0.43	0.57	0.79

Note: Correlations greater than 0.05 are statistically significant at the $p < .01$ level.
Physiological dysregulation measures are derived from eight standardized biomarkers and the measures are standardized to have a mean of 0 and SD of one across waves. Blood pressure (BP) is derived from the mean of systolic and diastolic blood pressure (mmHg). Heart rate (HR) is measured in beats per minute. C-reactive protein (CRP) is the natural logarithm of CRP measured in mg/L. White blood cell count (WB) is measured in 10^9 cells/L. Triglyceride level (Trig) is measured in mmol/L. The cholesterol ratio is the ratio of total to HDL cholesterol (both measured in mmol/L). Glucose (Gluc) is measured in mmol/L and glycated haemoglobin (HbA1c) is measured in mmol/mol.

Table S2.

Diagnoses of Chronic Conditions and Medication Usage for ELSA Participants.

Variable	Full sample (N = 3,609) %	Obese (N = 1,122) %	Non-obese (N = 2,487) %
High blood pressure	39.4	51.6	33.9
Angina	8.4	11.2	7.1
Congestive heart failure	0.6	1.5	0.2
Myocardial infarction	4.9	6.1	4.3
Arrhythmia	7.0	7.6	6.7
Heart murmur	3.9	4.3	3.7
Stroke	3.2	3.8	2.9
Diabetes or high blood sugar	8.8	15.1	6.0
High cholesterol	35.0	39.7	32.8
Lung disease	5.9	5.9	5.9
Asthma	13.2	16.4	11.7
Arthritis	36.6	46.4	32.1
Osteoporosis	7.7	8.4	7.4
Cancer	7.6	7.8	7.5
Psychiatric condition	10.3	11.2	9.9
Glaucoma	5.9	5.4	6.1
Diabetic retinopathy	1.7	3.3	1.0
Macular degeneration	3.3	3.0	3.5
Cataracts	18.5	19.5	18.1
Blood pressure medication	29.0	38.8	24.6
Injecting insulin	1.7	3.0	1.1
Diabetes medication	5.8	10.4	3.7
Cholesterol lowering medication	20.6	26.5	18.0
Cholesterol medication (prophylactic use)	1.6	2.0	1.5

Table S3.

Correlation Matrix for Obesity, Weight Discrimination, the Physiological Dysregulation Index, and Covariates.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Obesity	1.00																	
2. Weight discrimination	0.27	1.00																
3. Physiol. dysreg. (T1)	0.33	0.15	1.00															
4. Physiol. dysreg. (T2)	0.27	0.16	0.68	1.00														
5. Age	-0.04	-0.11	0.03	0.04	1.00													
6. Female	0.06	0.02	-0.08	-0.07	0.06	1.00												
7. White	0.00	-0.06	-0.09	-0.02	0.02	0.07	1.00											
8. Degree	-0.07	0.00	-0.09	-0.09	-0.14	-0.13	-0.04	1.00										
9. Wealth	-0.15	-0.09	-0.19	-0.20	-0.11	-0.05	0.02	0.25	1.00									
10. High blood pressure	0.17	0.06	0.16	0.16	0.22	-0.02	-0.01	-0.07	-0.13	1.00								
11. Angina	0.07	0.04	0.03	0.05	0.23	-0.05	0.01	-0.05	-0.13	0.18	1.00							
12. Heart failure	0.08	0.02	0.16	0.08	0.00	-0.01	-0.09	0.02	-0.03	0.05	0.13	1.00						
13. Myocardial infarc.	0.04	0.00	-0.01	0.03	0.18	-0.05	0.03	-0.05	-0.09	0.14	0.40	0.11	1.00					
14. Arrhythmia	0.02	-0.02	-0.01	0.00	0.13	0.02	0.03	0.02	-0.03	0.09	0.11	0.09	0.11	1.00				
15. Heart murmur	0.02	0.00	-0.01	-0.01	0.12	0.07	0.03	-0.01	-0.04	0.11	0.11	0.06	0.14	0.15	1.00			
16. Diabetes	0.15	0.08	0.24	0.27	0.09	-0.05	-0.03	0.00	-0.11	0.22	0.16	0.11	0.16	0.03	0.04	1.00		
17. Stroke	0.02	0.01	0.01	0.02	0.15	0.02	0.04	-0.04	-0.10	0.13	0.11	0.00	0.11	0.09	0.11	0.06	1.00	
18 High cholesterol	0.07	0.04	0.06	0.08	0.13	0.05	0.04	-0.08	-0.05	0.26	0.16	0.00	0.09	0.05	0.06	0.13	0.13	1.00
19. Lung disease	0.00	0.05	0.04	0.07	0.06	-0.02	0.01	-0.04	-0.12	0.06	0.10	0.02	0.06	0.03	0.06	0.02	0.02	0.06
20. Asthma	0.07	0.05	0.07	0.06	0.01	0.06	0.01	0.01	-0.07	0.02	-0.01	-0.02	-0.03	0.05	0.03	0.00	0.05	0.04
21. Arthritis	0.14	0.06	0.07	0.08	0.18	0.18	0.01	-0.09	-0.16	0.17	0.14	0.07	0.06	0.11	0.11	0.06	0.09	0.15
22. Osteoporosis	0.02	0.00	0.05	0.06	0.14	0.18	-0.03	-0.06	-0.07	0.05	0.11	0.09	0.10	0.06	0.09	0.00	0.06	0.06
23. Cancer	0.01	0.03	0.02	0.03	0.11	0.06	-0.02	-0.02	0.00	0.04	0.03	0.07	0.02	0.04	0.03	0.02	0.00	0.02
24. Psychiatric condition	0.02	0.06	0.03	0.04	-0.12	0.07	0.06	0.05	-0.06	0.03	0.02	0.02	-0.01	0.01	-0.01	0.00	-0.01	0.05
25. Glaucoma	-0.01	-0.01	0.00	0.01	0.16	-0.01	0.01	-0.03	-0.04	0.08	0.05	0.07	0.07	0.05	0.05	0.02	-0.01	0.06
26. Diabetic retinopathy	0.08	0.06	0.12	0.10	0.06	0.00	-0.01	0.00	-0.05	0.12	0.08	-0.01	0.08	0.07	0.03	0.36	0.11	0.09
27. Macular degen.	-0.01	-0.03	-0.03	0.00	0.19	0.01	0.04	0.00	-0.01	0.05	0.06	-0.02	0.02	0.04	0.05	0.02	0.02	-0.01
28. Cataracts	0.02	-0.03	0.04	0.04	0.48	0.09	0.00	-0.06	-0.05	0.15	0.17	0.02	0.14	0.08	0.07	0.09	0.12	0.10

29. Blood pressure med.	0.15	0.07	0.13	0.13	0.25	-0.04	-0.04	-0.07	-0.13	0.77	0.19	0.06	0.10	0.08	0.08	0.22	0.14	0.24
30. Injecting insulin	0.07	0.06	0.20	0.13	0.04	-0.01	-0.08	0.00	-0.04	0.10	0.13	0.15	0.08	0.05	0.00	0.39	0.11	0.06
31. Diabetes medication	0.14	0.09	0.24	0.24	0.05	-0.05	-0.05	0.00	-0.09	0.15	0.09	0.11	0.07	0.01	-0.01	0.77	0.07	0.11
32. Cholesterol med.[a]	0.10	0.04	0.06	0.08	0.14	0.03	0.01	-0.08	-0.09	0.26	0.20	0.01	0.11	0.04	0.07	0.18	0.15	0.68
33. Cholesterol med.[b]	0.02	-0.01	0.02	0.05	0.05	-0.02	0.01	0.00	-0.03	0.05	0.07	-0.01	0.06	0.02	0.04	0.11	-0.01	0.17
34. Depressive symp.	0.08	0.16	0.11	0.14	0.03	0.19	0.01	-0.11	-0.27	0.09	0.09	0.04	0.09	0.06	0.05	0.08	0.04	0.11

[a] Cholesterol lowering medication.
[b] Cholesterol medication (prophylactic use)

Table S3 (continued).

Correlation Matrix for Obesity, Weight Discrimination, Physiological Dysregulation Index, and Covariates.

	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
19. Lung disease	1.00														
20. Asthma	0.14	1.00													
21. Arthritis	0.08	0.07	1.00												
22. Osteoporosis	0.10	0.09	0.16	1.00											
23. Cancer	0.06	0.04	0.03	0.11	1.00										
24. Psychiatric condition	0.05	0.09	0.07	0.04	-0.01	1.00									
25. Glaucoma	0.08	-0.02	0.08	0.06	0.05	-0.02	1.00								
26. Diabetic retinopathy	0.00	-0.01	0.05	0.00	0.01	-0.01	0.08	1.00							
27. Macular degen.	-0.02	0.01	0.06	0.00	0.06	-0.03	0.06	0.06	1.00						
28. Cataracts	0.06	0.03	0.14	0.13	0.05	-0.06	0.19	0.06	0.16	1.00					
29. Blood pressure med.	0.03	0.01	0.14	0.01	0.04	-0.01	0.07	0.12	0.05	0.15	1.00				
30. Injecting insulin	-0.01	-0.01	0.00	0.03	0.04	-0.02	0.02	0.47	-0.01	0.06	0.10	1.00			
31. Diabetes medication	0.01	0.01	0.03	0.00	0.01	-0.01	-0.03	0.35	-0.02	0.06	0.18	0.41	1.00		
32. Cholesterol med.[a]	0.05	0.04	0.14	0.06	0.02	0.02	0.04	0.13	0.01	0.10	0.30	0.10	0.18	1.00	
33. Cholesterol med.[b]	0.01	0.04	0.05	0.01	0.01	-0.01	0.00	0.01	-0.02	0.01	0.04	0.03	0.08	-0.07	1.00
34. Depressive symp.	0.14	0.07	0.19	0.11	0.06	0.20	0.05	0.04	0.00	0.08	0.09	0.04	0.05	0.10	0.02

[a] Cholesterol lowering medication.
[b] Cholesterol medication (prophylactic use)

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Table S4.

Association between Perceived Weight Discrimination and Longitudinal Changes in

Individual Biomarker Outcomes.

	d	95% CI Lower ; Upper	
Blood pressure	.13	[-.04 ;	.30]
Heart rate	.07	[-.12 ;	.25]
C-reactive protein	.16	[.00 ;	.32]
White blood cell count	.04	[-.12 ;	.20]
Triglycerides	.20	[.01 ;	.39]
Total cholesterol to HDL ratio	.10	[-.10 ;	.29]
Glucose	.07	[-.20;	.33]
Glycated hemoglobin	.15	[-.15;	.45]

Note. 95% confidence intervals are based on models using robust standard errors.

Associations are not statistically significant after correction for multiple comparisons.

Models use latent change in biomarker z-scores as outcome variables. Models are adjusted

for baseline biomarker levels, age, sex, ethnicity (white vs. other), degree qualification,

household wealth, medication usage, chronic conditions, and depressive symptoms.