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Review

Allostatic Load Measurement: A Systematic Review of Reviews, Database Inventory, and Considerations for Neighborhood Research

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Supplemental Materials Table S1. Allostatic Load Calculation Methods extracted from 18 synthesis reviews identified through a systematic literature search for "allostatic load" conducted on 6 July 2021.

Reference	Was Allostatic Load Calculation Method Addressed?	Summary of Allostatic Load Calculation Methods Used
Szanton et al., 2005[34]	Yes	Most common method, allostatic load dichotomized biomarkers based on quartiles and then summed
Dowd et al., 2009[44]	No	Not addressed
Juster et al., 2010[49]	Yes	Most common method, allostatic load dichotomized biomarkers based on quartiles and then summed
Beckie, 2012[90]	Yes	Allostatic load dichotomized biomarkers based on clinical ranges or quartiles
Mauss et al., 2015[111]	Yes	A discussion regarding the strengths and limitations of the varied methods of allostatic load calculations
Duong et al., 2017[18]	Yes	Variations include a) sum of biomarker z-scores, b) sum of dichotomized biomarkers based on quartiles, and c) sum of dichotomized biomarkers based on clinical cutoffs
Johnson et al., 2017[19]	Yes	Allostatic load dichotomized biomarkers based on quartiles
Rosemberg et al., 2017[142]	Yes	Most common method, allostatic load dichotomized biomarkers based on quartiles and then summed
Wiley et al., 2017[32]	Yes	Most common method, allostatic load dichotomized biomarkers based on quartiles and then summed
Ribeiro et al., 2018[11]	Yes	Variations include a) sum of biomarker z-scores, b) sum of dichotomized biomarkers based on quartiles, and c) sum of dichotomized biomarkers based on clinical cutoffs

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Larrabee Sonderland et al., 2019[165]	No	Not addressed
D'Amico et al., 2020[33]	Yes	Variations include a) sum of biomarker z-scores, b) sum of dichotomized biomarkers based on quartiles, and c) sum of dichotomized biomarkers based on clinical cutoffs
Ketheesan et al., 2020[183]	Yes	Allostatic load dichotomized biomarkers based on clinical ranges or quartiles
Kerr et al., 2020[190]	No	Not addressed
Misiak, 2020[228]	No	Not addressed
Suvarna et al., 2020[236]	No	Not addressed
Mathew et al., 2021[251]	Yes	Variations include a) sum of biomarker z-scores, b) sum of dichotomized biomarkers based on quartiles, and c) sum of dichotomized biomarkers based on clinical cutoffs
Whelan et al., 2021[260]	Yes	Biomarker summary scores with higher values indicating greater physiological strain.

Supplemental Materials Table S2. Database inventory extracted from 18 synthesis reviews identified through a systematic literature search for "allostatic load" conducted on 6 July 2021.

Database Name	Website	Biomarkers Available
Databases with Georeferenced Biomarker Data		
National Health and Nutrition Examination Survey (NHANES)	https://www.cdc.gov/nchs/nhanes/index.htm	A1C, albumin, BMI, CRP, creatinine, DBP, fasting glucose, HR, PR, SBP, TC, TG, and WHR
Health and Retirement Study (HRS)	https://hrs.isr.umich.edu/about	A1C, CRP, Cystatin-C, DBP, HDL, HR, SBP, TC, and WC
Public Databases		
All of Us Research Hub (discovered outside of the review)	https://www.researchallofus.org/	A1C, albumin, BMI, cortisol, CRP, creatinine, DBP, DHEA, Epinephrine (n <1000), HDL, Heart Rate, LDL, SBP, TC, and TG
Multi-Ethnic Study of Atherosclerosis (MESA)	https://www.mesa-nhlbi.org/	Glucose, HR, HWR, LDL, PP, SBP, and TG

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Community Child Health Research Network (CCHN)	https://dash.nichd.nih.gov/study/1649	A1C, BMI, cortisol, CRP, DBP, HDL, LDL, SBP, and WHR
Other Databases Cited in Review		
MIDUS: Midlife in the United States	https://www.icpsr.umich.edu/web/pages/NACDA/midus.html	A1C, DBP, TC, cortisol, CRP, DHEA, epinephrine, e-selectin, fibrinogen, HRV, ICAM, IL-6, norepinephrine, and SBP
Jackson Heart Study	https://www.jacksonheartstudy.org/	A1C, albumin, BMI, CRP, creatinine, DBP, E-selectin, fasting glucose, HDL, HOMA-IR, WHR, HR, LDL, TC, and TG
National Archive of Computerized Data on Aging (NACDA)	https://www.icpsr.umich.edu/web/pages/NACDA/	Albumin, creatinine clearance, CRP, DBP, HDL, IL-6, SBP, TC, TC: HDL, and WHR

Note: A1C = glycosylated hemoglobin, BMI = body mass index, CRP = C-reactive protein, DBP = diastolic blood pressure, DHEA = dehydroepiandrosterone, HDL = high-density lipoprotein, HOMA-IR = homeostatic model assessment for insulin resistance, HR=heart rate, HRV= heart rate variability, ICAM=intracellular adhesion molecule, IL-6= interleukin 6, LDL= low-density lipoprotein, PP= pulse pressure, SBP=systolic blood pressure, TC= total cholesterol, TC:HDL= high-density lipoprotein to total cholesterol density, TG= triglycerides, WHR = waist to hip ratio, and WC= waist circumference. The darker shaded biomarkers are the original 10, BMI, and CRP.