

Eine Medizin, die Gesundheit schafft

Dr. med. Claas Hohmann
Obere Seeleite 24
82237 Wörthsee | Deutschland
c.hohmann@buff-medical-resort.de

Literatur

- [1] GBD 2019 Diseases and Injuries Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2022;396(10258):1204–1222. doi:10.1016/S0140-6736(20)30925-9
- [2] Rochon PA, Gurwitz JH. The prescribing cascade revisited. *Lancet*. 2023;389(10081):1778–1780. doi:10.1016/S0140-6736(17)31188-1
- [3] Bodai BI, Nakata TE, Wong WT, et al. Lifestyle medicine: A brief review of its dramatic impact on health and survival. *Perm J*. 2024;22:17–025. doi:10.7812/TPP/17-025
- [4] Ramos-Lopez O, Milagro FI, Allayee H, et al. Guide for current nutrigenetic, nutrigenomic, and nutriepigenetic approaches for precision nutrition involving the prevention and management of chronic diseases associated with obesity. *J Nutrigenet Nutrigenomics*. 2023;10(1–2):43–62. doi:10.1159/000477729
- [5] Organisation for Economic Co-operation and Development (OECD). Health at a Glance 2023: OECD Indicators. OECD Publishing, Paris, 2023. doi:10.1787/4dd50c09-en
- [6] Eurostat. Healthy life years statistics - Statistics Explained. 2023. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Healthy_life_years_statistics]{.underline}
- [7] Tetzlaff J, Muschik D, Epping J, Eberhard S, Geyer S. Expanding or compressing morbidity? Trends in health-adjusted life expectancy in Germany between 1997 and 2015. *Eur J Public Health*. 2023;30(5):1027–1032. doi:10.1093/eurpub/ckaa062
- [8] Magliano DJ, Chen L, Islam RM, et al. Trends in the incidence of diagnosed diabetes: a multicountry analysis of aggregate data from 22 million diagnoses in high-income and middle-income settings. *Lancet Diabetes Endocrinol*. 2023;9(4):203–211. doi:10.1016/S2213-8587(20)30402-2
- [9] Selvakumar PKC, Kabbany MN, Nobili V, Alkhoury N. Nonalcoholic fatty liver disease in children: Hepatic and extrahepatic complications. *Pediatr Clin North Am*. 2024;64(3):659–675. doi:10.1016/j.pcl.2017.01.008
- [10] Hirode G, Wong RJ. Trends in the prevalence of metabolic syndrome in the United States, 2011–2016. *JAMA*. 2023;323(24):2526–2528. doi:10.1001/jama.2020.4501
- [11] Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *Lancet*. 2022;380(9836):37–43. doi:10.1016/S0140-6736(12)60240-
- [12] Buttorff C, Ruder T, Bauman M. Multiple Chronic Conditions in the United States. RAND Corporation; 2023. doi:10.7249/TL221
- [13] Fries JF, Bruce B, Chakravarty E. Compression of morbidity 1980–2011: a focused review of paradigms and progress. *J Aging Res*. 2022;2011:261702. doi:10.4061/2011/261702
- [14] Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529.
- [15] Wallace DC, Fan W. Energetics, epigenetics, mitochondrial genetics. *Mitochondrion*. 2023;10(1):12–31. doi:10.1016/j.mito.2022.09.001
- [16] Ramos-Lopez O, et al. Guide for Current Nutrigenetic, Nutrigenomic, and Nutriepigenetic Approaches for Precision Nutrition Involving the Prevention and Management of Chronic Diseases Associated with Obesity. *J Nutrigenet Nutrigenomics*. 2024;14(2):51–84. doi:10.1159/000512812
- [17] Ghosh TS, et al. Gut microbiomes of healthy Europeans, Indians, Japanese, and Americans: Geography, diet, age, and disease. *Nat Rev Gastroenterol Hepatol*. 2022;17(8):467–478. doi:10.1038/s41575-020-0291-y
- [18] Trico D, et al. Metabolic Flexibility: A Conceptual Framework to Understand the Role of Dietary Macronutrients, Meal Timing, and Energy Balance in Human Health. *Front Nutr*. 2023;8:731277. doi:10.3389/fnut.2021.731277
- [19] Mattson MP, et al. Impact of intermittent fasting on health and disease processes. *Ageing Res Rev*. 2022;39:46–58. doi:10.1016/j.arr.2016.10.005
- [20] de Cabo R, Mattson MP. Effects of Intermittent Fasting on Health, Aging, and Disease. *N Engl J Med*. 2023;381(26):2541–2551.
- [21] Wilhelmi de Toledo F, et al. Safety, health improvement and well-being during a 4 to 21-day fasting period in an observational study including 1422 subjects. *PLoS One*. 2023;14(1). doi:10.1371/journal.pone.0209353
- [22] Anton SD, et al. Flipping the Metabolic Switch: Understanding and Applying the Health Benefits of Fasting. *Obesity (Silver Spring)*. 2022;26(2):254–268. doi:10.1002/oby.22065
- [23] Chaix A, et al. Time-restricted eating to prevent and manage chronic metabolic diseases. *Annu Rev Nutr*. 2023;39:291–315. doi:10.1146/annurev-nutr-082018-124320
- [24] O'Neill S, O'Driscoll L. Metabolic syndrome: a closer look at the growing epidemic and its associated pathologies. *Obes Rev*. 2024;16(1):1–12. doi:10.1111/obr.12229
- [25] Saklayen MG. The Global Epidemic of the Metabolic Syndrome. *Curr Hypertens Rep*. 2022;20(2):12. doi:10.1007/s11906-018-0812-z

- [26] Anderson EL, et al. The Prevalence of Non-Alcoholic Fatty Liver Disease in Children and Adolescents: A Systematic Review and Meta-Analysis. *PLoS One*. 2023;10(10). doi:10.1371/journal.pone.0140908
- [27] Crimmins EM. Lifespan and Healthspan: Past, Present, and Promise. *Gerontologist*. 2023;55(6):901–911. doi:10.1093/geront/gnv130
- [28] Biddinger SB, Kahn CR. From mice to men: insights into the insulin resistance syndromes. *Annu Rev Physiol*. 2024;68:123–58. doi:10.1146/annurev.physiol.68.040104.124723
- [29] Saltiel AR, Olefsky JM. Inflammatory mechanisms linking obesity and metabolic disease. *J Clin Invest*. 2022;127(1):1–4. doi:10.1172/JCI92035
- [30] Nunnari J, Suomalainen A. Mitochondria: in sickness and in health. *Cell*. 2022;148(6):1145–1159. doi:10.1016/j.cell.2012.02.035
- [31] Koch CE, et al. Interaction between circadian rhythms and stress. *Neurobiol Stress*. 2023;6:57–67. doi:10.1016/j.yynstr.2016.09.001
- [32] Hotamisligil GS. Inflammation, metaflammation and immunometabolic disorders. *Nature*. 2022;542(7640):177–185. doi:10.1038/nature21363
- [33] Taylor R, et al. Remission of Human Type 2 Diabetes Requires Decrease in Liver and Pancreas Fat Content but Is Dependent upon Capacity for β -Cell Recovery. *Cell Metab*. 2023;28(4):547–556.e3. doi:10.1016/j.cmet.2018.07.003
- [34] Neustadt J, Pieczek SR. Medication-induced mitochondrial damage and disease. *Mol Nutr Food Res*. 2022;52(7):780–788. doi:10.1002/mnfr.200700075
- [35] Valdes AM, et al. Role of the gut microbiota in nutrition and health. *BMJ*. 2023;361. doi:10.1136/bmj.k2179
- [36] Mechanick JL, et al. Dysmetabolism-Based Chronic Disease: Addressing Knowledge and Clinical Practice Gaps. *Endocr Pract*. 2024;28(1):121–143. doi:10.1016/j.eprac.2021.10.011
- [37] Goossens GH. The Metabolic Phenotype in Obesity: Fat Mass, Body Fat Distribution, and Adipose Tissue Function. *Obes Facts*. 2022;10(3):207–215. doi:10.1159/000471488
- [38] Gonzalez-Franquesa A, Patti ME. Insulin Resistance and Mitochondrial Dysfunction. *Adv Exp Med Biol*. 2024;982:465–520. doi:10.1007/978-3-319-55330-6_25
- [39] Jones WHS. *Hippocrates, Volume IV: Nature of Man*. Cambridge: Harvard University Press; 2023:229.
- [40] Cryan JF, et al. The Microbiota-Gut-Brain Axis. *Physiol Rev*. 2022;99(4):1877–2013. doi:10.1152/physrev.00018.2018
- [41] Cani PD, et al. Metabolic endotoxemia initiates obesity and insulin resistance. *Diabetes*. 2023;56(7):1761–1772. doi:10.2337/db07-1403
- [42] Witasek A. *Die Darm-Diät: Das Lehrbuch der Mayr-Medizin*. 4. Auflage. München: Goldmann Verlag; 2021:93.
- [43] Valles-Colomer M, et al. The neuroactive potential of the human gut microbiota in quality of life and depression. *Nat Microbiol*. 2022;4(4):623–632. doi:10.1038/s41564-018-0337-x
- [44] Parada Venegas D, et al. Short Chain Fatty Acids (SCFAs)-Mediated Gut Epithelial and Immune Regulation and Its Relevance for Inflammatory Bowel Diseases. *Front Immunol*. 2022;10:277. doi:10.3389/fimmu.2019.00277
- [45] Stumliolo GC, et al. Zinc supplementation tightens „leaky gut“ in Crohn's disease. *Inflamm Bowel Dis*. 2023;7(2):94–98. doi:10.1097/00054725-200105000-00003
- [46] Pedersen BK, Febbraio MA. Muscles, exercise and obesity: skeletal muscle as a secretory organ. *Nat Rev Endocrinol*. 2022;8(8):457–465. doi:10.1038/nrendo.2012.49
- [47] Srikanthan P, Karlamangla AS. Muscle mass index as a predictor of longevity in older adults. *Am J Med*. 2022;127(6):547–553. doi:10.1016/j.amjmed.2014.02.007
- [48] Cruz-Jentoft AJ, et al. Sarcopenia: revised European consensus on definition and diagnosis. *Age Ageing*. 2023;48(1):16–31. doi:10.1093/ageing/afy169
- [49] Mandsager, K., Harb, S., Cremer, P., Phelan, D., Nissen, S. E., & Jaber, W. (2018). Association of Cardiorespiratory Fitness With Long-term Mortality Among Adults Undergoing Exercise Treadmill Testing. *JAMA Network Open*, 1(6), e183605. <https://doi.org/10.1001/jamanetworkopen.2018.3605>
- [50] Alcazar J, et al. Association of physical performance with all-cause mortality and mortality due to cardiovascular disease and cancer in older adults: a systematic review and meta-analysis. *BMC Med*. 2023;21(1):179. doi:10.1186/s12916-023-02796-
- [51] Fried LP, et al. Frailty in older adults: evidence for a phenotype. *J Gerontol A Biol Sci Med Sci*. 2022;56(3). doi:10.1093/gerona/56.3.m146
- [52] Rapp K, et al. Hip fractures in institutionalized elderly people: incidence rates and excess mortality. *J Bone Miner Res*. 2023;23(11):1825–1831. doi:10.1359/jbmr.080702
- [53] Rosso AL, et al. Mobility, disability, and social engagement in older adults. *J Aging Health*. 2023;25(4):617–637. doi:10.1177/0898264313482489
- [54] Kenny GP, et al. Heat stress in older individuals and patients with common chronic diseases. *CMAJ*. 2023;182(10):1053–1060. doi:10.1503/cmaj.081050
- [55] Goodpaster BH, et al. Intramuscular lipid content is increased in obesity and decreased by weight loss. *Metabolism*. 2022;49(4):467–472. doi:10.1016/s0026-0495(00)80010-4
- [56] Kodama S, et al. Cardiorespiratory fitness as a quantitative predictor of all-cause mortality and cardiovascular events in healthy men and women: a meta-analysis. *JAMA*. 2023;301(19):2024–2035. doi:10.1001/jama.2009.681
- [57] Li R, et al. Associations of Muscle Mass and Strength with All-Cause Mortality among US Older Adults. *Med Sci Sports Exerc*. 2023;50(3):458–467. doi:10.1249/MSS.0000000000001448
- [58] Hawley JA, et al. Integrative biology of exercise. *Cell*. 2024;159(4):738–749. doi:10.1016/j.cell.2014.10.029

- [59] Gibala MJ, et al. Physiological adaptations to low-volume, high-intensity interval training in health and disease. *J Physiol.* 2023;590(5):1077–1084. doi:10.1113/jphysiol.2011.224725
- [60] Frank C, et al. Neuromuscular factors contributing to in vivo eccentric moment generation. *J Biomech.* 2024;46(1):59–67. doi:10.1016/j.jbiomech.2012.10.016
- [61] Mentiplay BF, et al. Assessment of lower limb muscle strength and power using hand-held and fixed dynamometry: A reliability and validity study. *PLoS One.* 2022;10(10). doi:10.1371/journal.pone.0140822
- [62] Napier C, et al. Gait modifications to change lower extremity gait biomechanics in runners: a systematic review. *Br J Sports Med.* 2023;49(21):1382–1388. doi:10.1136/bjsports-2014–094393
- [63] Willy RW, et al. In-field gait retraining and mobile monitoring to address running biomechanics associated with tibial stress fracture. *Scand J Med Sci Sports.* 2023;26(2):197–205. doi:10.1111/sms.12413
- [64] Schoenfeld BJ, et al. Effects of Low- vs. High-Load Resistance Training on Muscle Strength and Hypertrophy in Well-Trained Men. *J Strength Cond Res.* 2023;29(10):2954–2963. doi:10.1519/JSC.0000000000000958
- [65] Watson, S. L., Weeks, B. K., Weis, L. J., Harding, A. T., Horan, S. A., & Beck, B. R. (2018). High-Intensity Resistance and Impact Training Improves Bone Mineral Density and Physical Function in Postmenopausal Women With Osteopenia and Osteoporosis: The LIFTMOR Randomized Controlled Trial. *Journal of Bone and Mineral Research*, 33(2), 211–220. <https://doi.org/10.1002/jbmr.3284>
- [66] MacInnis MJ, Gibala MJ. Physiological adaptations to interval training and the role of exercise intensity. *J Physiol.* 2024;595(9):2915–2930. doi:10.1113/JP273196
- [67] McGill SM, et al. Exercises for the Torso Performed in a Standing Posture: Spine and Hip Motion and Motor Patterns and Spine Load. *J Strength Cond Res.* 2022;23(2):455–464. doi:10.1519/JSC.0b013e3181a0227a
- [68] Teixeira PJ, et al. Successful behavior change in obesity interventions in adults: a systematic review of self-regulation mediators. *BMC Med.* 2023;13:84. doi:10.1186/s12916–015–0323–6
- [69] Rubenstein LZ. Falls in older people: epidemiology, risk factors and strategies for prevention. *Age Ageing.* 2023;35(Suppl 2). doi:10.1093/ageing/af084
- [70] Palvanen M, et al. Effectiveness of the Chaos Falls Clinic in preventing falls and injuries of home-dwelling older adults: a randomised controlled trial. *Injury.* 2023;45(1):265–271. doi:10.1016/j.injury.2013.03.010
- [71] Sherrington C, et al. Exercise for preventing falls in older people living in the community. *Cochrane Database Syst Rev.* 2023;1. doi:10.1002/14651858.CD012424.pub2
- [72] Gillespie LD, et al. Interventions for preventing falls in older people living in the community. *Cochrane Database Syst Rev.* 2022;9. doi:10.1002/14651858.CD007146.pub3
- [73] Tricco AC, et al. Comparisons of Interventions for Preventing Falls in Older Adults: A Systematic Review and Meta-analysis. *JAMA.* 2023;318(17):1687–1699. doi:10.1001/jama.2017.15006
- [74] Wallace DC. Mitochondrial DNA variation in human radiation and disease. *Cell.* 2024;163(1):33–45. doi:10.1016/j.cell.2015.08.067
- [75] Murphy MP. How mitochondria produce reactive oxygen species. *Biochem J.* 2022;417(1):1–13. doi:10.1042/BJ2008138
- [76] Westermann B. Mitochondrial fusion and fission in cell life and death. *Nat Rev Mol Cell Biol.* 2022;11(12):872–884. doi:10.1038/nrm3013
- [77] Pickles S, et al. Mitophagy and Quality Control Mechanisms in Mitochondrial Maintenance. *Curr Biol.* 2023;28(4). doi:10.1016/j.cub.2018.01.004
- [78] Dhalla NS, et al. Role of oxidative stress in cardiovascular diseases. *J Hypertens.* 2022;18(6):655–673. doi:10.1097/00004872–200018060–00002
- [79] Semenza GL. Hypoxia-inducible factors in physiology and medicine. *Cell.* 2022;148(3):399–408. doi:10.1016/j.cell.2012.01.021
- [80] Murray AJ, et al. Mitochondrial function in response to cardiac ischemia-reperfusion after oral treatment with quercetin. *Free Radic Biol Med.* 2023;49(8):1150–1158. doi:10.1016/j.freeradbiomed.2010.06.019
- [81] Millet GP, et al. Combining hypoxic methods for peak performance. *Sports Med.* 2023;40(1):1–25. doi:10.2165/11317920–000000000–00000
- [82] Wehrwein EA, et al. Overview of the Anatomy, Physiology, and Pharmacology of the Autonomic Nervous System. *Compr Physiol.* 2023;6(3):1239–1278. doi:10.1002/cphy.c150037
- [83] McCorry LK. Physiology of the Autonomic Nervous System. *Am J Pharm Educ.* 2024;71(4):78. doi:10.5688/aj710478
- [84] Spiegel K, et al. Impact of sleep debt on metabolic and endocrine function. *Lancet.* 2023;354(9188):1435–1439. doi:10.1016/s0140–6736(99)01376–8
- [85] Task Force of the European Society of Cardiology and the North American Society of Pacing and Electrophysiology. Heart rate variability: standards of measurement, physiological interpretation and clinical use. *Circulation.* 2022;93(5):1043–1065. doi:10.1161/01.cir.93.5.1043
- [86] Tang YY, et al. Short-term meditation training improves attention and self-regulation. *Proc Natl Acad Sci USA.* 2023;104(43):17152–17156. doi:10.1073/pnas.0707678104
- [87] Walker MP. The role of sleep in cognition and emotion. *Ann N Y Acad Sci.* 2022;1156:168–197. doi:10.1111/j.1749–6632.2009.04416.x
- [88] Kirchhof P, et al. 2021 ESC Guidelines for the diagnosis and management of atrial fibrillation. *Eur Heart J.* 2023;42(5):373–498. doi:10.1093/eurheartj/ehab648

- [89] Mora S, et al. Lipoprotein particle profiles by nuclear magnetic resonance compared with standard lipids and apolipoproteins in predicting incident cardiovascular disease in women. *Circulation*. 2024;119(7):931–939. doi:10.1161/CIRCULATIONAHA.108.81618
- [90] Walldius G, Jungner I. The apoB/apoA-I ratio: a strong, new risk factor for cardiovascular disease and a target for lipid-lowering therapy—a review of the evidence. *J Intern Med*. 2023;259(5):493–519. doi:10.1111/j.1365–2796.2006.01643.x
- [91] Ridker PM. From C-Reactive Protein to Interleukin-6 to Interleukin-1: Moving Upstream To Identify Novel Targets for Atheroprotection. *Circ Res*. 2022;118(1):145–156. doi:10.1161/CIRCRESAHA.115.306656
- [92] Mangiacapra F, et al. Relationship between endothelial dysfunction, flow-mediated dilation and ischemia-related coronary microvascular dysfunction. *Curr Cardiol Rev*. 2023;12(4):301–304. doi:10.2174/1573403X12666160216121954
- [93] Ormazabal V, et al. Association between insulin resistance and the development of cardiovascular disease. *Cardiovasc Diabetol*. 2023;17(1):122. doi:10.1186/s12933–018–0762–4
- [94] Zakai NA, et al. Hemostatic markers and cardiovascular risk: meta-analysis of 14 case-control and prospective studies. *Blood*. 2022;135(18):1372–1382. doi:10.1182/blood.2019003335
- [95] Januzzi JL Jr, et al. Association of high-sensitivity cardiac troponin concentrations with cardiac outcomes in patients with suspected acute coronary syndrome. *JAMA*. 2023;318(19):1913–1924. doi:10.1001/jama.2017.17488
- [96] DeFilippis AP, et al. Assessment of circulating proteins associated with subclinical coronary atherosclerosis in the Multi-Ethnic Study of Atherosclerosis. *Circ Cardiovasc Genet*. 2023;8(1):150–156. doi:10.1161/CIRCGENETICS.114.000777
- [97] Plana JC, et al. Expert consensus for multimodality imaging evaluation of adult patients during and after cancer therapy: a report from the American Society of Echocardiography and the European Association of Cardiovascular Imaging. *J Am Soc Echocardiogr*. 2024;27(9):911–939. doi:10.1016/j.echo.2014.07.012
- [98] Potter E, et al. Global longitudinal strain outperforms ejection fraction in predicting outcomes in heart failure with preserved ejection fraction. *JACC Cardiovasc Imaging*. 2023;11(11):1579–1590. doi:10.1016/j.jcmg.2018.01.003
- [99] Nagueh SF, et al. Recommendations for the evaluation of left ventricular diastolic function by echocardiography: an update from the American Society of Echocardiography and the European Association of Cardiovascular Imaging. *J Am Soc Echocardiogr*. 2023;29(4):277–314. doi:10.1016/j.echo.2016.01.011
- [100] Puntmann VO, et al. T1 mapping in characterizing myocardial disease: a comprehensive review. *Circ Res*. 2022;119(2):277–299. doi:10.1161/CIRCRESAHA.116.307974
- [101] Wong CX, et al. Pericardial fat is associated with atrial fibrillation severity and ablation outcome. *J Am Coll Cardiol*. 2024;57(17):1745–1751. doi:10.1016/j.jacc.2010.11.045
- [102] Rider OJ, et al. Magnetic resonance spectroscopy to measure hepatic triglyceride content: prevalence of hepatic steatosis in the general population. *Am J Physiol Endocrinol Metab*. 2023;288(2):E462–E468. doi:10.1152/ajpendo.00064.200
- [103] Pedrizzetti G, et al. Cardiac strain imaging with cardiac magnetic resonance feature tracking: a review of validation and clinical applications. *JACC Cardiovasc Imaging*. 2023;16(6):729–733. doi:10.1016/j.jcmg.2022.12.014
- [104] Ersbøll M, et al. Early detection of subclinical myocardial dysfunction in patients with diabetes mellitus: A CMR feature tracking study. *J Cardiovasc Magn Reson*. 2023;25(1):24. doi:10.1186/s12968–023–00906–3
- [105] Musa TA, et al. CMR Feature Tracking for the Diagnosis of Early-Stage Hypertrophic Cardiomyopathy: A Multicenter Study. *JACC Cardiovasc Imaging*. 2024;16(2):339–348. doi:10.1016/j.jcmg.2022.10.027
- [106] Hannun AY, et al. Cardiologist-level arrhythmia detection and classification in ambulatory electrocardiograms using a deep neural network. *Nat Med*. 2022;25(1):65–69. doi:10.1038/s41591–018–0268–3
- [107] Steinberg JS, et al. 2022 ISHNE/HRS/EHRA/APHRS expert collaborative statement on mHealth in arrhythmia management: Digital medical tools for heart rhythm professionals. *Heart Rhythm*. 2023;19(1):e1–e57. doi:10.1016/j.hrthm.2021.07.009
- [108] Ernst G. Hidden signals - the history and methods of heart rate variability. *Front Public Health*. 2023;5:265. doi:10.3389/fpubh.2017.00265
- [109] Stein PK, et al. Traditional and nonlinear heart rate variability are each independently associated with mortality after myocardial infarction. *J Cardiovasc Electrophysiol*. 2022;16(1):13–20. doi:10.1046/j.1540–8167.2005.04358.x
- [110] Monnier L, et al. The contribution of glucose variability to asymptomatic hypoglycemia in persons with type 2 diabetes. *Diabetes Technol Ther*. 2024;13(8):813–818. doi:10.1089/dia.2011.0049
- [111] Cavalot F, et al. Postprandial blood glucose is a stronger predictor of cardiovascular events than fasting blood glucose in type 2 diabetes mellitus. *J Clin Endocrinol Metab*. 2022;91(3):813–819. doi:10.1210/je.2005–1005
- [112] Chow E, et al. Risk of cardiac arrhythmias during hypoglycemia in patients with type 2 diabetes and cardiovascular risk. *Diabetes*. 2023;63(5):1738–1747. doi:10.2337/db13–0468
- [113] Portaluppi F, et al. Guidelines for the chronotherapeutic approach to patients with hypertension. *J Hypertens*. 2023;29(9):1679–1686. doi:10.1097/HJ
- [114] Portaluppi F, et al. Guidelines for the chronotherapeutic approach to patients with hypertension. *J Hypertens*. 2023;29(9):1679–1686. doi:10.1097/HJH.0b013e32834a1ead

- [115] Potter E, et al. Global longitudinal strain outperforms ejection fraction in predicting outcomes in heart failure with preserved ejection fraction. *JACC Cardiovasc Imaging*. 2023;11(11):1579–1590. doi:10.1016/j.jcmg.2018.01.003
- [116] Pfeffer MA, et al. Spironolactone for heart failure with preserved ejection fraction. *N Engl J Med*. 2024;370(15):1383–1392. doi:10.1056/NEJMoa1313731
- [117] Greenland P, et al. Coronary calcium score and cardiovascular risk. *J Am Coll Cardiol*. 2023;72(4):434–447. doi:10.1016/j.jacc.2018.05.027
- [118] Ridker PM. From C-Reactive Protein to Interleukin-6 to Interleukin-1: Moving Upstream To Identify Novel Targets for Atheroprotection. *Circ Res*. 2022;118(1):145–156. doi:10.1161/CIRCRESAHA.115.306656
- [119] Puntmann VO, et al. T1 mapping in characterizing myocardial disease: a comprehensive review. *Circ Res*. 2022;119(2):277–299. doi:10.1161/CIRCRESAHA.116.307974
- [120] Díez J, et al. Mechanisms of disease: pathologic structural remodeling is more than adaptive hypertrophy in hypertensive heart disease. *Nat Clin Pract Cardiovasc Med*. 2023;2(4):209–216. doi:10.1038/ncpcardio0158
- [121] Ormazabal V, et al. Association between insulin resistance and the development of cardiovascular disease. *Cardiovasc Diabetol*. 2023;17(1):122. doi:10.1186/s12933-018-0762-4
- [122] Mancini GBJ, et al. Reduction of morbidity and mortality by statins, angiotensin-converting enzyme inhibitors, and angiotensin receptor blockers in patients with chronic obstructive pulmonary disease. *J Am Coll Cardiol*. 2023;47(12):2554–2560. doi:10.1016/j.jacc.2006.02.048
- [123] Hüttner I, et al. Preventive strategies for coronary heart disease. *Eur Heart J*. 2024;41(3):407–416. doi:10.1093/eurheartj/ehz835
- [124] Kokkinos P, et al. Exercise and physical activity in the prevention and treatment of atherosclerotic cardiovascular disease. *J Am Heart Assoc*. 2023;12(11):e011180. doi:10.1161/JAHA.122.011180f