

Thema: Wechseljahre des Mannes? Ein Blick auf das verborgene Hormontief

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Literatur

Deutsche Gesellschaft für Endokrinologie DGE. "Altersbedingter Testosteronmangel: Keine „männlichen Wechseljahre“ – aber echte Symptome“, 6. Juni 2025.

Cheng H, Zhang X, Li Y, Cao D, Luo C, Zhang Q, Zhang S, Jiao Y. Age-related testosterone decline: mechanisms and intervention strategies. *Reprod Biol Endocrinol*. 2024 Nov 14;22(1):144. doi: 10.1186/s12958-024-01316-5. PMID: 39543598; PMCID: PMC11562514.

Kelsey TW, Li LQ, Mitchell RT, Whelan A, Anderson RA, Wallace WH. A validated age-related normative model for male total testosterone shows increasing variance but no decline after age 40 years. *PLoS One*. 2014 Oct 8;9(10):e109346. doi: 10.1371/journal.pone.0109346. Erratum in: *PLoS One*. 2015 Feb 06;10(2):e0117674. PMID: 25295520; PMCID: PMC4190174.

Ward KA, Pye SR, Adams JE, Boonen S, Vanderschueren D, Borghs H, Gaytant J, Gielen E, Bartfai G, Casanueva FF, Finn JD, Forti G, Giwercman A, Han TS, Huhtaniemi IT, Kula K, Labrie F, Lean ME, Pendleton N, Punab M, Silman AJ, Wu FC, O'Neill TW; EMAS study group. Influence of age and sex steroids on bone density and geometry in middle-aged and elderly European men. *Osteoporos Int*. 2011 May;22(5):1513-23. doi: 10.1007/s00198-010-1437-5. Epub 2010 Oct 30. PMID: 21052641; PMCID: PMC3073040.

Kirby M, Hackett G, Ramachandran S. Testosterone and the Heart. *Eur Cardiol Rev*. 2019;14(2):103–10. doi: 10.15420/ecr.2019.13.1.

Shirakawa T, Ide H, Ikehata Y, Lu Y, Kinouchi R, Iwasa T, Koga K, Tateishi S, Fujino Y, Yasui T, Horie S. Impact of Symptoms of Late-Onset Hypogonadism as a Potential Driver of Presenteeism. *Am J Mens Health*. 2025 Jul-Aug;19(4):15579883251343972. doi: 10.1177/15579883251343972. PMID: 40626351; PMCID: PMC12246511.

Okawara M, Tateishi S, Horie S, Yasui T, Fujino Y. Association between andropause symptoms and work functioning impairment: a cross-sectional study in two Japanese companies. *Ind Health*. 2025 May 20;63(3):288-297. doi: 10.2486/indhealth.2024-0168. PMID: 39631881; PMCID: PMC12107424.

Määttänen I, Gluschkoff K, Komulainen K, Airaksinen J, Savelieva K, García-Velázquez R, Jokela M. Testosterone and specific symptoms of depression: Evidence from NHANES 2011-2016. *Compr Psychoneuroendocrinol*. 2021 Mar 10;6:100044. doi: 10.1016/j.cpne.2021.100044. PMID: 35757365; PMCID: PMC9216439.

Indirli R, Lanzi V, Arosio M, Mantovani G, Ferrante E. The association of hypogonadism with depression and its treatments. *Front Endocrinol (Lausanne)*. 2023 Aug 10;14:1198437. doi: 10.3389/fendo.2023.1198437. PMID: 37635965; PMCID: PMC10449581.

Barone B, Napolitano L, Abate M, Cirillo L, Reccia P, Passaro F, Turco C, Morra S, Mastrangelo F, Scarpato A, et al. The Role of Testosterone in the Elderly: What Do We Know? *Int J Mol Sci*. 2022;23(7):3535. doi: 10.3390/ijms23073535.

Liu V, Johnson H, Huang D, Clift A, Alaa A, El-Osta A. A Qualitative Exploration of Testosterone Replacement Therapy: Men's Experiences and Healthcare Barriers. 2025.
doi: 10.21203/rs.3.rs-6261097/v1.