

CO.med 5/2022 – Literatur

Titel: Rauchen in der Schwangerschaft – Epidemiologie, Risiken und Empfehlungen (S. 12–15)

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- [1] Schaller K et al. Tabakatlas Deutschland 2020. Heidelberg: Deutsches Krebsforschungszentrum, 2020.
- [2] Tong VT et al. Trends in smoking before, during, and after pregnancy--Pregnancy Risk Assessment Monitoring System, United States, 40 sites, 2000–2010. *MMWR Surveill Summ* 2013; 62(6): 1–19.
- [3] Besson A et al. Smoking Prevalence among Physicians: A Systematic Review and Meta-Analysis. *Int J Environ Res Public Health* 2021; 18: 13328.
- [4] Statistisches Bundesamt (Destatis), Wissenschaftszentrum Berlin für Sozialforschung (WZB). Datenreport 2016. Bonn: Bundeszentrale für politische Bildung (bpb), 2016. S. 305.
- [5] Drogen und Suchtbericht der Bundesregierung 2016 und 2018
- [6] Patanavanich R, Glantz SA. Smoking Is Associated With COVID-19 Progression: A Meta-analysis. *Nicotine Tob Res* 2020; 22: 1653–1656.
- [7] Aabakke AJM et al. SARS-CoV-2 infection in pregnancy in Denmark-characteristics and outcomes after confirmed infection in pregnancy: A nationwide, prospective, population-based cohort study. *Acta Obstet Gynecol Scand* 2021; 100: 2097–2110.
- [8] Huxley RR, Woodward M. Cigarette smoking as a risk factor for coronary heart disease in women compared with men: a systematic review and meta-analysis of prospective cohort studies. *Lancet* 2011; 378: 1297–1305.
- [9] ESHRE Capri Workshop Group. The influence of social factors on gender health. *Hum Reprod* 2016; 31: 1631–1637.
- [10] Corrales-Gutierrez I et al. Relationship between Eating Habits, Physical Activity and Tobacco and Alcohol Use in Pregnant Women: Sociodemographic Inequalities. *Nutrients* 2022; 14: 557.
- [11] Berlin I et al. Financial incentives for smoking cessation in pregnancy: multicentre randomised controlled trial. *BMJ* 2021; 375: e065217.
- [12] Stookey GK et al. Evaluation of biochemical validation measures in determination of smoking status. *J Dent Res* 1987; 66: 1597–1601.
- [13] Stead LF et al. Physician advice for smoking cessation. *Cochrane Database Syst Rev* 2008; 16: CD000165.
- [14] Gould GS et al. What components of smoking cessation care during pregnancy are implemented by health providers? A systematic review and meta-analysis. *BMJ Open* 2019; 9: e026037.
- [15] <https://www.bundesaerztekammer.de/aerzte/versorgung/suchtmedizin/tabak/raucherberatung-behandlung/>
- [16] Jones M et al. Re-starting smoking in the postpartum period after receiving a smoking cessation intervention: a systematic review. *Addiction* 2016; 111: 981–990.
- [17] Faber T et al. Smoke-free legislation and child health. *NPJ Prim Care Respir Med* 2016; 17: 26: 16067.
- [18] Odendaal H et al. Prenatal Alcohol in SIDS and Stillbirth (PASS) Network. Association of Prenatal Exposure to Maternal Drinking and Smoking With the Risk of Stillbirth. *JAMA Netw Open* 2021; 4(8): e2121726.
- [19] Pereira PP et al. Maternal Active Smoking During Pregnancy and Low Birth Weight in the Americas: A Systematic Review and Meta-analysis. *Nicotine Tob Res* 2017; 19: 497–505.
- [20] Horiuchi S et al. Japan Environment And Children's Study Group. Influence of Maternal Active and Secondhand Smoking during Pregnancy on Childhood Obesity at 3 Years of Age: A Nested Case-Control Study from the Japan Environment and Children's Study (JECS). *Int J Environ Res Public Health* 2021; 18: 12506.
- [21] Taylor EJ et al. Maternal smoking behaviour across the first two pregnancies and small for gestational age birth: Analysis of the SLOPE (Studying Lifecourse Obesity PrEdictors) population-based cohort in the South of England. *PLoS One* 2021; 16(11): e0260134.

- [22]Yang L et al. Maternal cigarette smoking before or during pregnancy increases the risk of birth congenital anomalies: a population-based retrospective cohort study of 12 million mother-infant pairs. *BMC Med* 2022; 20: 4.
- [23]McEvoy CT, Spindel ER. Pulmonary Effects of Maternal Smoking on the Fetus and Child: Effects on Lung Development, Respiratory Morbidities, and Life Long Lung Health. *Paediatr Respir Rev* 2017; 21: 27–33.
- [24]Bauer T et al. Environment-induced epigenetic reprogramming in genomic regulatory elements in smoking mothers and their children. *Mol Syst Biol* 2016; 12(3): 861.
- [25]Jauniaux E, Burton GJ. Morphological and biological effects of maternal exposure to tobacco smoke on the fetoplacental unit. *Early Hum Dev* 2007; 83: 699–706.
- [26]Machado Jde B et al. Quantitative effects of tobacco smoking exposure on the maternal-fetal circulation. *BMC Pregnancy Childbirth* 2011; 11: 24.
- [27]Anblagan D et al. Maternal smoking during pregnancy and fetal organ growth: a magnetic resonance imaging study. *PLoS One* 2013; 8: e67223.
- [28]Zacharasiewicz A. Maternal smoking in pregnancy and its influence on childhood asthma. *ERJ Open Res* 2016; 2 pii: 00042-2016.
- [29]Rayfield S, Plugge E. Systematic review and meta-analysis of the association between maternal smoking in pregnancy and childhood overweight and obesity. *J Epidemiol Community Health* 2017; 71: 162–173.
- [30]Xepapadaki P et al. Association of passive exposure of pregnant women to environmental tobacco smoke with asthma symptoms in children. *Pediatr Allergy Immunol* 2009; 20: 423–429.
- [31]Grabenhenrich LB et al. Early-life determinants of asthma from birth to age 20 years: a German birth cohort study. *J Allergy Clin Immunol* 2014; 133: 979–988.
- [32]Doherty SP et al. Early life insult from cigarette smoke may be predictive of chronic diseases later in life. *Biomarkers* 2009; 14 Suppl 1: 97–101.
- [33]Schnurr TM et al. Smoking during pregnancy is associated with child overweight independent of maternal pre-pregnancy BMI and genetic predisposition to adiposity. *Sci Rep* 2022; 12: 3135.
- [34]Gutvirtz G et al. Maternal smoking during pregnancy and long-term neurological morbidity of the offspring. *Addict Behav* 2019; 88: 86–91.
- [35]Rice F et al. Identifying the contribution of prenatal risk factors to offspring development and psychopathology: What designs to use and a critique of literature on maternal smoking and stress in pregnancy. *Dev Psychopathol* 2018; 30: 1107–1128.
- [36]Froggatt S, Covey J, Reissland N. Infant neurobehavioural consequences of prenatal cigarette exposure: A systematic review and meta-analysis. *Acta Paediatr* 2020; 109: 1112–1124.
- [37]Tranquilli AL, Landi B. The origin of pre-eclampsia: from decidual "hyperoxia" to late hypoxia. *Med Hypotheses* 2010; 75: 38–46.
- [38]Bainbridge SA et al. Direct placental effects of cigarette smoke protect women from pre-eclampsia: the specific roles of carbon monoxide and antioxidant systems in the placenta. *Med Hypotheses* 2005; 64: 17–27.
- [39]Wikström AK et al. Tobacco use during pregnancy and preeclampsia risk: effects of cigarette smoking and snuff. *Hypertension* 2010; 55: 1254–1259.
- [40]Luque-Fernandez MA et al. Deconstructing the smoking-preeclampsia paradox through a counterfactual framework. *Eur J Epidemiol* 2016; 31: 613–623.
- [41]Blanc J et al. Nicotine Replacement Therapy during Pregnancy and Child Health Outcomes: A Systematic Review. *Int J Environ Res Public Health* 2021; 18: 4004.
- [42]Hickson C et al. Comparison of nicotine exposure during pregnancy when smoking and abstinent with nicotine replacement therapy: systematic review and meta-analysis. *Addiction* 2019; 114: 406–424.
- [43]Calder R et al. Vaping in Pregnancy: A Systematic Review. *Nicotine Tob Res* 2021; 23: 1451–1458.
- [44]Tzortzi A et al. A Systematic Literature Review of E-Cigarette-Related Illness and Injury: Not Just for the Respiriologist. *Int J Environ Res Public Health* 2020; 17: 2248.
- [45]Whittington JR et al. The Use of Electronic Cigarettes in Pregnancy: A Review of the Literature. *Obstet Gynecol Surv* 2018; 73: 544–549.

[46]Napierala M et al. Tobacco smoking and breastfeeding: Effect on the lactation process, breast milk composition and infant development. A critical review. *Environ Res* 2016; 151: 321–338.

Titel: Biofaktoren für Mutter und Kind – Schwangerschaftskomplikationen und Entwicklungsstörungen entgegenwirken (S. 25–27)

Autoren: Dr. rer. nat. Daniela Birkelbach

- [1] From the Centers for Disease Control (CDC). Use of folic acid for prevention of spina bifida and other neural tube defects – 1983-1991. *JAMA* 1991; 266(9): 1190–1191.
- [2] Pei L et al. Effect of periconceptional folic acid supplementation on the risk of neural tube defects associated with a previous spontaneous abortion or maternal first-trimester fever. *Hum Reprod* 2019; 34(8): 1587–1594.
- [3] Shiliang L et al. Effect of folic acid food fortification in Canada on congenital heart disease subtypes. Clinical perspective. *Circulation* 2016; 134(9): 647.
- [4] <https://www.dge.de/wissenschaft/referenzwerte/folat/>
- [5] https://www.mri.bund.de/fileadmin/MRI/Institute/EV/NVSII_Abschlussbericht_Teil_2.pdf, S. 121.
- [6] WHO Guideline, Daily iron and folic acid supplementation in pregnant women, 2012.
- [7] Nutzen-Risiko-Abwägung einer flächendeckenden Anreicherung von Mehl mit Folsäure. Stellungnahme Nr. 027/2017 des BfR vom 13. September 2017.
- [8] <https://www.bfr.bund.de/cm/343/nutzen-risiko-abwaegung-einer-flaechendeckenden-anreicherung-von-mehl-mit-folsaeure.pdf>
- [9] Informationen zu folatreichen Lebensmitteln finden Sie unter www.gf-biofaktoren.de
- [10] Imbard A et al. Neural tube defects, folic acid and methylation. *Int J Environ Res Public Health* 2013; 10(9): 4352–4389.
- [11] Llamas Centeno MJ et al. Folic acid: Primary prevention of neural tube defects. Literature Review. *Arch Esp Urol* 2016; 69(2): 73–85.
- [12] Obeid R et al. The effectiveness of daily supplementation with 400 or 800 µg/day folate in reaching protective red blood folate concentrations in non-pregnant women: a randomized trial. *Eur J Nutr* 2018; 57(5): 1771–1780.
- [13] Pietrzik K et al. *Handbuch der Vitamine*. München/Jena: Urban & Fischer Verlag, 2008.
- [14] Wolffenbuttel BHR et al. The many faces of cobalamin (Vitamin B12) deficiency. *Mayo Clin Proc Innov* 2019; 3(2): 200–214.
- [15] Allen LH. Vitamin B12 metabolism and status during pregnancy, lactation and infancy. In: *Nutrition regulation during pregnancy, lactation and infant growth*. Springer US 1994: 173–186.
- [16] Rogne T et al. Associations of maternal vitamin B12 concentration in pregnancy with the risks of preterm birth and low birth weight: A systematic review and meta-analysis of individual participant data. *Am J Epidemiol* 2017; 185(3): 212–223.
- [17] Bala R et al. Hyperhomocysteinemia and low vitamin B12 are associated with the risk of early pregnancy loss: A clinical study and meta-analyses. *Nutr Res* 2021; 91: 57–66.
- [18] Black MM. Effects of vitamin B12 and folate deficiency on brain development in children. *Food Nutr Bull* 2008; 29(2 Suppl): 126–131.
- [19] Schlereth F, Badenhop K. Vitamin D – mehr als ein Knochenhormon. *Internist* 2016; 57: 646–655.
- [20] Wuertz C et al. Cross-sectional study of factors that influence the 25-hydroxyvitamin D status in pregnant women and in cord blood in Germany. *Br J Nutr* 2013; 110: 1895–1902.
- [21] Gellert S et al. Breastfeeding women are at higher risk of vitamin D deficiency than non-breastfeeding women – insights from the German VitaMinFemin study. *Int Breastfeeding J* 2017; 12: 19.
- [22] <https://www.dge.de/wissenschaft/referenzwerte/vitamin-d/>

- [23]McDonnell S et al Maternal 25(OH)D concentrations \geq 40 ng/mL associated with 60 % lower preterm birth risk among general obstetrical patients at an urban medical center. PLoS One 2017; 12(7): e0180483.
- [24]Elson D et al. Vitamin D deficiency in mothers, neonates and children. J Steroid Biochem & Mol Biol 2018; 175:195–199.
- [25]Tapia G et al. Maternal and newborn vitamin D-binding protein, vitamin D levels, vitamin D receptor genotype, and childhood Type 1 Diabetes. Diabetes Care 2019; 42(4): 553–559.
- [26]Oberhelmann SS et al. Maternal vitamin D supplementation to improve the vitamin D status of breast-fed infants: a randomized controlled trial. Mayo Clinic Proceedings 2013; 88: 1378–1387.
- [27]https://www.awmf.org/uploads/tx_szleitlinien
- [28]<https://www.dge.de/wissenschaft/referenzwerte/magnesium/>
- [29]Institute of Medicine, Food and Nutrition board. Dietary reference intakes for Calcium, Phosphorous, Magnesium, Vitamin D and Fluoride. Standing Committee on the Scientific Evaluation of Dietary Reference Intakes. Washington D.C.: The National Academic Press, 1997.
- [30]Spätling L et al. Magnesiumsupplementation in pregnancy. A double-blind study. Brit J Obstet Gynecol 1988, 95: 120–125.
- [31]Classen HG et al. Magnesium in Geburtshilfe und Gynäkologie. Magnesium-Bulletin 1984; 2: 45–51.
- [32]Young GL, Jewell D. Interventions for leg cramps in pregnancy. Cochrane Database Syst Rev 2002; (1): CD000121.
- [33]Arikan G et al. Frühgeburtslichkeit unter oraler Magnesiumsubstitution bei unkomplizierten Schwangerschaften. Eine randomisierte kontrollierte klinische Studie. Geb Frauenheilk 1997; 57: 491–495.
- [34]Kisters K et al. Plasma, intracellular and membrane Mg²⁺ concentration in normal pregnancy and preeclampsia. Hypertension in pregnancy 1998; 17: 169–178.
- [35]Bullarbo M et al. Magnesium supplementation to prevent high blood pressure in pregnancy: a randomised placebo control trial. Arch Gynecol Obstet 2013; 288: 1269–1274.
- [36]Young GL, Jewell D. Interventions for leg cramps in pregnancy. Cochrane Database Syst Rev 2002; (1): CD000121.
- [37]Supakatisant C et al. Oral magnesium for relief in pregnancy-induced leg cramps: a randomized controlled trial. Maternal and Child Nutrition 2015; 11: 139–145.
- [38]Yang SJ et al. Serum magnesium level is associated with type 2 diabetes in women with a history of gestational diabetes mellitus: The Korea National Diabetes Program Study. J Korean Med Sci 2014; 29: 84–89.
- [39]Spätling L et al. Magnesiumsupplementation in der Schwangerschaft. Empfehlungen der Gesellschaft für Magnesium-Forschung e. V. Frauenarzt 2015; 56: 892–897.
- [40]Muhamed PK et al. Zinc is the most important trace element. Ugeskr Laeger 2014; 176(5): V11120654.
- [41]Hess SY et al. Effects of maternal zinc supplementation in pregnancy and lactation outcomes. Food Nutr Bull 2009; 30(1): 60–78.
- [42]Fallah A et al. Zinc is an essential element for male fertility: A review of Zn roles in men's health, germination, sperm quality and fertilization. J Reprod Infertil 2018; 19(2): 69–81.
- [43]<https://www.dge.de/wissenschaft/referenzwerte/zink/>
- [44]Bjørklund G et al. Interactions of iron with manganese, zinc, chromium, and selenium as related to prophylaxis and treatment of iron deficiency. J Trace Elem Med Biol 2017; 41: 41–53.
-

Titel: Ayurvedische Therapie als komplementäre Behandlung bei Morbus Parkinson – Ein Auszug aus dem Buch „Geist, Gehirn, Gefühle“ (S. 31–34)

Autoren: Dr. med. Kalyani Nagersheth

- [1] Sampson TR et al. Gut Microbiota Regulate Motor Deficits and Neuroinflammation in a Model of Parkinson's Disease. Cell 2016; 167(6): 1469–1480.e12.
 - [2] Abbott RD et al. Frequency of bowel movements and the future risk of Parkinson's disease. Neurology 2001; (57): 456–462.
-

Titel: Heilsame Klänge bei Migräne – Entspannung mithilfe von Klangarbeit (S. 38–40)

Autoren: Philipp Feichtinger

- [1] Hoerner K. Zehn Faktoren über Schmerzen im Schädel. Focus Online 24.03.2016. https://www.focus.de/gesundheit/ratgeber/kopfschmerz/zehn-fakten-ueber-migraene-kopfschmerz_id_1821505.html
 - [2] Bierbach E. Naturheilpraxis heute. München: Elsevier, 2013.
 - [3] Migräne Chirurgie Zentrum. Migräne – mehr als starke Kopfschmerzen. <https://www.migraine-surgery-centre.com/ch/de/migraene-information/fakten.html>
 - [4] Kühne T, Cousto H. Heilsame Frequenzen. Murnau a. Staffelsee: Mankau Verlag, 2016.
 - [5] Reimann M. Kolloidales Gold. Hanau: Amra Verlag, 2017.
 - [6] Reimann M. Kolloidales Kupfer. Hanau: Amra Verlag, 2018.
 - [7] Reimann M. Kolloidales Magnesium. Hanau: Amra Verlag, 2019.
 - [8] Kühne T, Schubert I. Die heilende Kraft der Planetenschwingung. Murnau a. Staffelsee: Mankau, 2011.
 - [9] Wu L, Lauer N. Praxisbuch Energiemedizin. München: Gräfe und Unzer, 2015.
 - [10] Kühne T, Nischwitz P. Stimmgabeltherapie – Heilsames Wissen und praktische Anwendung. Murnau a. Staffelsee: Mankau, 2015.
 - [11] Gienger M. Die Steinheilkunde – das Handbuch. Saarbrücken: Neue Erde, 2014.
 - [12] Schirner M. Aroma-Öle. Darmstadt: Schirner, 2015.
 - [13] Wunsch A et al. Lichttherapie – Die Medizin der Zukunft: Einfach und wirkungsvoll. Petersberg: Via Nova, 2017.
-

Titel: Übergewicht und Vitalstoffmangel – Therapieoptionen mit Vitamin D, Selen und Sanddornöl (S. 46–47)

Autoren: Heike Lück-Knobloch

- [1] <https://idw-online.de/de/news775131>
- [2] <https://www.deutschesgesundheitsportal.de/2021/10/21/die-wichtigste-ursache-des-bluthochdrucks-hierzulande-ist-uebergewicht/?indication=>
- [3] <https://www.aerzteblatt.de/treffer?mode=s&wo=1041&typ=1&nid=108399&s=Rheumamedikamenten&s=Wirkung&s=hemmt&s=von&s=%DCbergewicht>
- [4] <https://idw-online.de/de/news778133>
- [5] https://www.bzfe.de/fileadmin/newsletter/2021/BZfE-Newsletter_Nr._39_vom_29._September_2021.html#Marke2

- [6] <https://www.deutschesgesundheitsportal.de/2021/06/02/corona-befeuert-eine-andere-pandemie/?indication=>
- [7] Cordeiro A et al. Adipose tissue dysfunction and MAFLD in obesity on the scene of COVID-19. *Clin Res Hepatol Gastroenterol* 2021; 46(3): 101807.
- [8] Aghili SMM et al. Obesity in COVID-19 era, implications for mechanisms, comorbidities, and prognosis: A review and meta-analysis. *Int J Obes (Lond)* 2021; 45(5): 998–1016.
- [9] <https://www.deutschesgesundheitsportal.de/2021/10/21/die-wichtigste-ursache-des-bluthochdrucks-hierzulande-ist-uebergewicht/?indication=>
- [10] <https://www.aerzteblatt.de/treffer?mode=s&wo=1041&typ=1&nid=127728&s=K%FCnstliche&s=S%FC%DFstoffe>
- [11] Hajhashemy Z et al. Relationship between abdominal obesity (based on waist circumference) and serum vitamin D levels: A systematic review and meta-analysis of epidemiologic studies. *Nutr Rev* 2021; nuab070.
- [12] Perna S. The enigma of vitamin D supplementation in aging with obesity. *Minerva Gastroenterol (Torino)*. 2021 Epub ahead of print. PMID: 34328295.
- [13] Boughanem H et al. 25-Hydroxyvitamin D status is associated with interleukin-6 methylation in adipose tissue from patients with colorectal cancer. *Food Funct* 2021; 12(20): 9620–9631.
- [14] Park CY, Han SN. The role of vitamin D in adipose tissue biology: Adipocyte differentiation, energy metabolism, and inflammation. *J Lipid Atheroscler* 2021; 10(2): 130–144.
- [15] https://www.rki.de/DE/Content/InfAZ/N/Neuartiges_Coronavirus/COVRIIN_Dok/Therapieuebersicht.pdf?__blob=publicationFile
- [16] Soares de Oliveira AR et al. Selenium status and oxidative stress in obese: Influence of adiposity. *Eur J Clin Invest* 2021;51(9): e13538.
- [17] Lehtonen H-M et al. Different berries and berry fractions have various but slightly positive effects on the associated variables of metabolic diseases on overweight and obese women. *Eur J Clin Nutr* 2011; 65(3): 394–401.
- [18] Larmo PS et al. Effects of sea buckthorn and bilberry on serum metabolites differ according to baseline metabolic profiles in overweight women: A randomized crossover trial. *Am J Clin Nutr* 2013; 98(4): 941–951.