

Daftar Pustaka

- Aguirre, M., & Venema, K. (2015). Does the Gut Microbiota Contribute to Obesity? Going beyond the Gut Feeling. *Microorganisms*, 3(2), 213–235. <https://doi.org/10.3390/microorganisms3020213>
- Ali, H., Bakar, A. M. F., Majid, M., Muhammad, N. and Lim, S. Y. (2020). In vitro anti-diabetic activity of stingless bee honey from different botanical origins. *Food Research*, 4 (5)(October), 1421–1426.
- American Medical Association. (2001). Executive Summary of the Third Report (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). *Journal of American Medical Association*, 285(19), 2486–2497.
- Anhê, F. F., Barra, N. G., Cavallari, J. F., Henriksbo, B. D., & Schertzer, J. D. (2021). Metabolic endotoxemia is dictated by the type of lipopolysaccharide. *Cell Reports*, 36(11). <https://doi.org/10.1016/j.celrep.2021.109691>
- Azad, M. A. K., Sarker, M., Li, T., & Yin, J. (2018). Probiotic Species in the Modulation of Gut Microbiota: An Overview. *BioMed Research International*, 2018. <https://doi.org/10.1155/2018/9478630>
- Barnes, R. C., Kim, H., Fang, C., Bennett, W., Nemec, M., Sirven, M. A., Suchodolski, J. S., Deutz, N., Britton, R. A., Talcott, M., & Talcott, S. T. (2019). Body mass index as a determinant of systemic exposure to gallotannin metabolites during 6- week consumption of mango (*Mangifera indica* L.) and modulation of intestinal microbiota in lean and obese individuals. *Molecular Nutrition & Food Research*, 63(2).
- Ben Othman, M., & Sakamoto, K. (2020). Effect of inactivated *Bifidobacterium longum* intake on obese diabetes model mice (TSOD). *Food Research International*, 129, 108792. <https://doi.org/https://doi.org/10.1016/j.foodres.2019.108792>
- Biluca, F. C., da Silva, B., Caon, T., Mohr, E. T. B., Vieira, G. N., Gonzaga, L. V., Vitali, L., Micke, G., Fett, R., Dalmarco, E. M., & Costa, A. C. O. (2020). Investigation of phenolic compounds, antioxidant and anti-inflammatory activities in stingless bee honey (*Meliponinae*). *Food Research International (Ottawa, Ont.)*, 129, 108756. <https://doi.org/10.1016/j.foodres.2019.108756>
- Bishara, J., Farah, R., Mograbi, J., Khalaila, W., Abu-elheja, O., Mahamid, M., & Nseir, W. (2013). Obesity as a Risk Factor for *Clostridium difficile* Infection. 57, 489–493. <https://doi.org/10.1093/cid/cit280>
- Bo, T., Wen, J., Zhao, Y., Tian, S., Zhang, X., & Wang, D. (2020). *Bifidobacterium pseudolongum* reduces triglycerides by modulating gut microbiota in mice fed high-fat food. *The Journal of Steroid Biochemistry and Molecular Biology*, 198, 105602. <https://doi.org/https://doi.org/10.1016/j.jsbmb.2020.105602>
- Bubnov, R. V., Babenko, L. P., Lazarenko, L. M., Mokrozub, V. V., Demchenko, O. A., Nechypurenko, O. V., & Spivak, M. Y. (2017). Comparative study of probiotic effects of *Lactobacillus* and

- Bifidobacteria strains on cholesterol levels, liver morphology and the gut microbiota in obese mice. *EPMA Journal*, 8(4), 357–376. <https://doi.org/10.1007/s13167-017-0117-3>
- Cani, P. D. (2018). Human gut microbiome: Hopes, threats and promises. *Gut*, 67(9), 1716–1725. <https://doi.org/10.1136/gutjnl-2018-316723>
- Catalkaya, G., Venema, K., Lucini, L., Rocchetti, G., Delmas, D., Daglia, M., De Filippis, A., Xiao, H., Quiles, J. L., Xiao, J., & Capanoglu, E. (2020). Interaction of dietary polyphenols and gut microbiota: Microbial metabolism of polyphenols, influence on the gut microbiota, and implications on host health. *Food Frontiers*, May, 109–133. <https://doi.org/10.1002/fft2.25>
- ChandranC, H., DasM, M., & R, K. T. (2016). Effect of prebiotics on synbiotic fermented milk. *World Journal of Pharmacy and Pharmaceutical Sciences*, 5(2), 1557–1566.
- Chen, J., He, X., & Huang, J. (2014). Diet Effects in Gut Microbiome and Obesity. *Journal of Food Science*, 79(4). <https://doi.org/10.1111/1750-3841.12397>
- Chen, L.-H., Chen, Y.-H., Cheng, K.-C., Chien, T.-Y., Chan, C.-H., Tsao, S.-P., & Huang, H.-Y. (2018). Antiobesity effect of *Lactobacillus reuteri* 263 associated with energy metabolism remodeling of white adipose tissue in high-energy-diet-fed rats. *The Journal of Nutritional Biochemistry*, 54, 87–94.
- Chick, H., Shin, H. S., & Ustunol, Z. (2001). Growth and acid production by lactic acid bacteria and bifidobacteria grown in skim milk containing honey. *Journal of Food Science*, 66(3), 478–481.
- Chung, H. J., Yu, J. G., Lee, I. A., Liu, M. J., Shen, Y. F., Sharma, S. P., Jamal, M. A. H. M., Yoo, J. H., Kim, H. J., & Hong, S. T. (2016). Intestinal removal of free fatty acids from hosts by *Lactobacilli* for the treatment of obesity. *FEBS Open Bio*, 6(1), 64–76. <https://doi.org/10.1002/2211-5463.12024>
- Crovesy, L., Ostrowski, M., Ferreira, D. M. T. P., Rosado, E. L., & Soares-Mota, M. (2017). Effect of *Lactobacillus* on body weight and body fat in overweight subjects: A systematic review of randomized controlled clinical trials. *International Journal of Obesity*, 41(11), 1607–1614. <https://doi.org/10.1038/ijo.2017.161>
- Csige, I., Ujvárosy, D., Szabó, Z., Lorincz, I., Paragh, G., Harangi, M., Somodi, S., & Santulli, G. (2018). The Impact of Obesity on the Cardiovascular System. *Journal of Diabetes Research*, 2018. <https://doi.org/10.1155/2018/3407306>
- Cuervo, A., Reyes-Gavilán, C. G. de los, Ruas-Madiedo, P., Lopez, P., Suarez, A., Gueimonde, M., & González, S. (2015). Red wine consumption is associated with fecal microbiota and malondialdehyde in a human population. *Journal of the American College of Nutrition*, 34(2), 135–141.
- Dabke, K., Hendrick, G., & Devkota, S. (2019). The gut microbiome and metabolic syndrome. *The Journal of Clinical Investigation*, 129(10),

4050–4057.

- David, L. A., Maurice, C. F., Carmody, R. N., Gootenberg, D. B., Button, J. E., Wolfe, B. E., Ling, A. V., Devlin, A. S., Varma, Y., & Fischbach, M. A. (2014). Diet rapidly and reproducibly alters the human gut microbiome. *Nature*, *505*(7484), 559–563.
- De Lorenzo, A., Gratteri, S., Gualtieri, P., Cammarano, A., Bertucci, P., & Di Renzo, L. (2019). Why primary obesity is a disease? *Journal of Translational Medicine*, *17*(1), 1–13. <https://doi.org/10.1186/s12967-019-1919-y>
- de Melo, F. H. C., Menezes, F. N. D. D., de Sousa, J. M. B., dos Santos Lima, M., da Silva Campelo Borges, G., de Souza, E. L., & Magnani, M. (2020). Prebiotic activity of monofloral honeys produced by stingless bees in the semi-arid region of Brazilian Northeastern toward *Lactobacillus acidophilus* LA-05 and *Bifidobacterium lactis* BB-12. *Food Research International*, *128*, 108809. <https://doi.org/https://doi.org/10.1016/j.foodres.2019.108809>
- Delgado, G. T. C., & Tamashiro, W. M. da S. C. (2018). Role of prebiotics in regulation of microbiota and prevention of obesity. *Food Research International*, *113*, 183–188.
- Direktorat Pencegahan dan Pengendalian Penyakit Menular. (2017). *PANDUAN PELAKSANAAN GERAKAN NUSANTARA TEKAN ANGKA OBESITAS (GENTAS)*. <http://www.p2ptm.kemkes.go.id/dokumen-ptm/pedoman-umum-gentas-gerakan-berantas-obesitas>
- Erejuwa, O. O., Sulaiman, S. A., & Ab Wahab, M. S. (2012). Oligosaccharides might contribute to the antidiabetic effect of honey: A review of the literature. *Molecules*, *17*(1), 248–266. <https://doi.org/10.3390/molecules17010248>
- Espley, R. V., Butts, C. A., Laing, W. A., Martell, S., Smith, H., McGhie, T. K., Zhang, J., Paturi, G., Hedderley, D., & Bovy, A. (2014). Dietary flavonoids from modified apple reduce inflammation markers and modulate gut microbiota in mice. *The Journal of Nutrition*, *144*(2), 146–154.
- Feizabadi, F., Sharifan, A., & Tajabadi, N. (2020). Isolation and identification of lactic acid bacteria from stored *Apis mellifera* honey. *Journal of Apicultural Research*, 1–6. <https://doi.org/10.1080/00218839.2020.1765490>
- Gallagher, D., Heymsfield, S. B., Heo, M., Jebb, S. A., Murgatroyd, P. R., & Sakamoto, Y. (2000). Healthy percentage body fat ranges: an approach for developing guidelines based on body mass index. *The American Journal of Clinical Nutrition*, *72*(3), 694–701.
- Garber, C. E. (2019). The Health Benefits of Exercise in Overweight and Obese Patients. *Current Sports Medicine Reports*, *18*(8), 287–291. <https://doi.org/10.1249/JSR.0000000000000619>
- Grosso, G. (2018). Effects of polyphenol-rich foods on human health. *Nutrients*, *10*(8). <https://doi.org/10.3390/nu10081089>

- Guo, P., Zhang, K., Ma, X., & He, P. (2020). Clostridium species as probiotics: Potentials and challenges. *Journal of Animal Science and Biotechnology*, 11(1), 1–10. <https://doi.org/10.1186/s40104-019-0402-1>
- Guo, X., Cheng, M., Zhang, X., Cao, J., Wu, Z., & Weng, P. (2017). Green tea polyphenols reduce obesity in high-fat diet-induced mice by modulating intestinal microbiota composition. *International Journal of Food Science & Technology*, 52(8), 1723–1730.
- Hashim, K., Chin, K., & Ahmad, F. (2021). The Mechanism of Honey in Reversing Metabolic Syndrome. *Molecules*, 26(24).
- Helmyati, S., Wisnusanti, S. U., Wigati, M., & Yuliati, E. (2019). The Relation Between Gut Microbiota and Obesity Among Children in West Lombok, West Nusa Tenggara, Indonesia. *Media Gizi Mikro Indonesia*, 11(1), 12. <https://doi.org/10.22435/mgmi.v11i1.1738>
- Honey Chandran, & Keerthi T R. (2018). Probiotic potency of Lactobacillus plantarum KX519413 and KX519414 isolated from honey bee gut. *FEMS Microbiology Letters*, 365(4), fnx285.
- Hussain, A., Kwon, M. H., Kim, H. K., Lee, H. S., Cho, J. S., & Lee, Y. I. (2020). Anti-Obesity Effect of Lactobacillus plantarum LB818 Is Associated with Regulation of Gut Microbiota in High-Fat Diet-Fed Obese Mice. *Journal of Medicinal Food*, 23(7), 750–759. <https://doi.org/10.1089/jmf.2019.4627>
- Ismail, M. M. (2017). Honey...Prebiotic and Antibiotic. *EC Microbiology*, 85, 243–245.
- Jamar, G., Santamarina, A. B., Dias, G. C., Masquio, D. C. L., de Rosso, V. V., & Pisani, L. P. (2018). Relationship between fatty acids intake and Clostridium coccoides in obese individuals with metabolic syndrome. *Food Research International*, 113, 86–92.
- Jiang, L., Xie, M., Chen, G., Qiao, J., Zhang, H., & Zeng, X. (2020). Phenolics and Carbohydrates in Buckwheat Honey Regulate the Human Intestinal Microbiota. *Evidence-Based Complementary and Alternative Medicine*, 2020. <https://doi.org/10.1155/2020/6432942>
- Jiao, X., Wang, Y., Lin, Y., Lang, Y., Li, E., Zhang, X., Zhang, Q., Feng, Y., Meng, X., & Li, B. (2019). Blueberry polyphenols extract as a potential prebiotic with anti-obesity effects on C57BL/6 J mice by modulating the gut microbiota. *The Journal of Nutritional Biochemistry*, 64, 88–100.
- Kabeerdoss, J., Sankaran, V., Pugazhendhi, S., & Ramakrishna, B. S. (2013). Clostridium leptum group bacteria abundance and diversity in the fecal microbiota of patients with inflammatory bowel disease: A case-control study in India. *BMC Gastroenterology*, 13(1). <https://doi.org/10.1186/1471-230X-13-20>
- Kek, S. P., Chin, N. L., Yusof, Y. A., Tan, S. W., & Chua, L. S. (2014). Total phenolic contents and colour intensity of Malaysian honeys from the Apis spp. and Trigona spp. bees. *Agriculture and Agricultural Science Procedia*, 2, 150–155.

- Kementerian Kesehatan RI. (2014). *PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 41 TAHUN 2014 TENTANG PEDOMAN GIZI SEIMBANG*. Kemenkes RI. <https://doi.org/10.1016/j.bbapap.2013.06.007>
- Kementerian Kesehatan RI Badan Penelitian dan Pengembangan. (2018). Hasil Utama Riset Kesehatan Dasar. *Kementrian Kesehatan Republik Indonesia*, 1–100. <https://doi.org/10.1016/j.bbapap.2013.06.007> Desember 2013
- Kim, B., Choi, H., & Yim, J. (2019). *Effect of Diet on the Gut Microbiota Associated with Obesity*. *Cvd*, 216–224.
- Kumar Singh, A., Cabral, C., Kumar, R., Ganguly, R., Kumar Rana, H., Gupta, A., Rosaria Lauro, M., Carbone, C., Reis, F., & Pandey, A. K. (2019). Beneficial effects of dietary polyphenols on gut microbiota and strategies to improve delivery efficiency. *Nutrients*, 11(9), 2216.
- Lashani, E., Davoodabadi, A., & Dallal, M. M. S. (2020). Some probiotic properties of lactobacillus species isolated from honey and their antimicrobial activity against foodborne pathogens. *Veterinary Research Forum*, 11(2), 121–126. <https://doi.org/10.30466/vrf.2018.90418.2188>
- LeBlanc, J. G., Chain, F., Martín, R., Bermúdez-Humarán, L. G., Courau, S., & Langella, P. (2017). Beneficial effects on host energy metabolism of short-chain fatty acids and vitamins produced by commensal and probiotic bacteria. *Microbial Cell Factories*, 16(1), 1–10.
- Lee, H.-S., Lim, W.-C., Lee, S.-J., Lee, S.-H., Lee, J.-H., & Cho, H.-Y. (2016). Antiobesity effect of garlic extract fermented by *Lactobacillus plantarum* BL2 in diet-induced obese mice. *Journal of Medicinal Food*, 19(9), 823–829.
- Leeming, E. R., Johnson, A. J., Apector, T. D., & Le Roy, C. I. (2019). Effect of Diet on the Gut Microbiota : Rethinking Intervention Duration. *Nutrients*, 11(12).
- Lim, S., Moon, J. H., Shin, C. M., Jeong, D., & Kim, B. (2020). Effect of *Lactobacillus sakei*, a probiotic derived from kimchi, on body fat in koreans with obesity: A randomized controlled study. *Endocrinology and Metabolism*, 35(2), 425–434. <https://doi.org/10.3803/EnM.2020.35.2.425>
- Ma, G., & Chen, Y. (2020). Polyphenol supplementation benefits human health via gut microbiota: A systematic review via meta-analysis. *Journal of Functional Foods*, 66, 103829.
- Masrul, M. (2018). Epidemi obesitas dan dampaknya terhadap status kesehatan masyarakat serta sosial ekonomi bangsa. *Majalah Kedokteran Andalas*, 41(3), 152. <https://doi.org/10.25077/mka.v41.i3.p152-162.2018>
- Mata, A., Masyarakat, P., & Harjanto, S. (2020). *Budidaya Lebah Madu Kelulut Sebagai Alternatif Mata Pencaharian Masyarakat*.
- Minami, J., Iwabuchi, N., Tanaka, M., Yamauchi, K., Xiao, J., Abe, F., & Sakane, N. (2018). Effects of *Bifidobacterium breve* B-3 on body fat

- reductions in pre-obese adults: A randomized, double-blind, placebo-controlled trial. *Bioscience of Microbiota, Food and Health*, 1–18.
- Mohan, A., Quek, S.-Y., Gutierrez-Maddox, N., Gao, Y., & Shu, Q. (2017). Effect of honey in improving the gut microbial balance. *Food Quality and Safety*, 1(May), 107–115. <https://doi.org/10.1093/fqs/fyx015>
- Mohd Rafie, A. Z., Syahir, A., Wan Ahmad, W. A. N., Mustafa, M. Z., & Mariatulqabtiah, A. R. (2018). Supplementation of Stingless Bee Honey from *Heterotrigna itama* Improves Antiobesity Parameters in High-Fat Diet Induced Obese Rat Model. *Evidence-Based Complementary and Alternative Medicine*, 2018, 6371582. <https://doi.org/10.1155/2018/6371582>
- Moreno-Indias, I., Sánchez-Alcoholado, L., Pérez-Martínez, P., Andrés-Lacueva, C., Cardona, F., Tinahones, F., & Queipo-Ortuño, M. I. (2016). Red wine polyphenols modulate fecal microbiota and reduce markers of the metabolic syndrome in obese patients. *Food & Function*, 7(4), 1775–1787.
- Muhammad Abdul Kadar, N. N., Ahmad, F., Teoh, S. L., & Yahaya, M. F. (2021). Caffeic Acid on Metabolic Syndrome: A Review. *Molecules (Basel, Switzerland)*, 26(18), 1–14. <https://doi.org/10.3390/molecules26185490>
- Natsir, R., Usman, A. N., Ardyansyah, B. D., & Fendi, F. (2020). Propolis and honey trigona decrease leptin levels of central obesity patients. *Enfermería Clínica*, 30, 96–99.
- Noratto, G. D., Garcia-Mazcorro, J. F., Markel, M., Martino, H. S., Minamoto, Y., Steiner, J. M., Byrne, D., Suchodolski, J. S., & Mertens-Talcott, S. U. (2014). Carbohydrate-free peach (*Prunus persica*) and plum (*Prunus domestica*) juice affects fecal microbial ecology in an obese animal model. *PloS One*, 9(7), e101723.
- Ooi, T. C., Yaacob, M., Rajab, N. F., Shahar, S., & Sharif, R. (2021). The stingless bee honey protects against hydrogen peroxide-induced oxidative damage and lipopolysaccharide-induced inflammation in vitro. *Saudi Journal of Biological Sciences*, 28(5), 2987–2994. <https://doi.org/10.1016/j.sjbs.2021.02.039>
- Pai, S., Shivappa, C. B., & Surendra, A. (2018a). Anti-obesity and Anti-hyperlipidemic activity of Processed Honey-A Randomised, Open labeled, Controlled Clinical Study. *Journal of Research in Traditional Medicine*, 4(2), 40–48.
- Pai, S., Shivappa, C. B., & Surendra, A. (2018b). Anti-obesity and Anti-hyperlipidemic activity of Processed Honey - A Randomised , Open labeled , Controlled Clinical Study. *Journal Of Research in Tradisional Medicine*, 4(2), 40–48. <https://doi.org/10.5455/JRTM.2018/816>
- Palazon-Bru, A., Hernandez-Lozano, D., & Gil-Guillen, V. F. (2021). Which physical exercise interventions increase HDL-cholesterol levels? A systematic review of meta-analyses of randomized controlled trials. *Sports Medicine*, 51(2), 243–253.
- Pessione, E. (2012). Lactic acid bacteria contribution to gut microbiota

- complexity: lights and shadows. *Frontiers in Cellular and Infection Microbiology*, 2(June), 86. <https://doi.org/10.3389/fcimb.2012.00086>
- Prajawanti, K. N. (2020). Pengaruh Pemberian Probiotik *Lactobacillus Rhamnosus* Dan *Bifidobacterium Bifidum* Terhadap Kadar Mda Dan Il-10 Pada *Rattus Norvegicus* Yang Diinduksi High Fat Diet. UNIVERSITAS AIRLANGGA.
- Radilla-Vázquez, R. B., Parra-Rojas, I., Martínez-Hernández, N. E., Márquez-Sandoval, Y. F., Illades-Aguiar, B., & Castro-Alarcón, N. (2016). Gut microbiota and metabolic endotoxemia in young obese mexican subjects. *Obesity Facts*, 9(1), 1–11. <https://doi.org/10.1159/000442479>
- Rahmawati, A. (2014). Mekanisme Terjadinya Inflamasi Dan Stres Oksidatif Pada Obesitas. *EL-Hayah*, 5(1), 1. <https://doi.org/10.18860/elha.v5i1.3034>
- Ramli, N. Z., Chin, K. Y., Zarkasi, K. A., & Ahmad, F. (2018). A review on the protective effects of honey against metabolic syndrome. *Nutrients*, 10(8), 1–21. <https://doi.org/10.3390/nu10081009>
- Ramli, N. Z., Chin, K. Y., Zarkasi, K. A., & Ahmad, F. (2019). The beneficial effects of stingless bee honey from *Heterotrigona itama* against metabolic changes in rats fed with high-carbohydrate and high-fat diet. *International Journal of Environmental Research and Public Health*, 16(24), 1–17. <https://doi.org/10.3390/ijerph16244987>
- Ranneh, Y., Akim, A. M., Hamid, H. A., Khazaai, H., Fadel, A., & Mahmoud, A. M. (2019). Stingless bee honey protects against lipopolysaccharide induced-chronic subclinical systemic inflammation and oxidative stress by modulating Nrf2, NF-κB and p38 MAPK. *Nutrition & Metabolism*, 16, 15. <https://doi.org/10.1186/s12986-019-0341-z>
- Ranneh, Y., Mahmoud, A. M., Fadel, A., Albujja, M., Akim, A. M., Hamid, H. A., & Khazaai, H. (2021). Acute Inflammation and Oxidative Stress Induced by Lipopolysaccharide and the Ameliorative Effect of Stingless Bee Honey. *Combinatorial Chemistry & High Throughput Screening*, 24(6), 744–757. <https://doi.org/10.2174/1386207323999200918152111>
- Rinninella, E., Raoul, P., Cintoni, M., Franceschi, F., Abele, G., Miggianno, D., Gasbarrini, A., & Mele, M. C. (2019). What is the Healthy Gut Microbiota Composition? A Changing Ecosystem across Age , Environment , Diet , and Diseases. *Microorganisms*, 7(1), 14. <https://doi.org/10.3390/microorganisms7010014>
- Ross, R. (2020). Statement Waist circumference as a vital sign in clinical practice : a Consensus Statement from the IAS and ICCR Working Group on Visceral Obesity. *Nature Reviews Endocrinology*, 16(March), 177–189. <https://doi.org/10.1038/s41574-019-0310-7>
- Sadeghi, F., Salehi, S., Kohanmoo, A., & Akhlaghi, M. (2019). Effect of Natural Honey on Glycemic Control and Anthropometric Measures of Patients with Type 2 Diabetes : A Randomized Controlled Crossover

- Trial. *International Journal of Preventif Medicine*, 10(3).
<https://doi.org/10.4103/ijpvm.IJPVM>
- Salazar, N., Neyrinck, A. M., Bindels, L. B., Druart, C., Ruas-Madiedo, P., Cani, P. D., de los Reyes-Gavilán, C. G., & Delzenne, N. M. (2019). Functional effects of EPS-producing bifidobacterium administration on energy metabolic alterations of diet-induced obese mice. *Frontiers in Microbiology*, 10(AUG), 1–12.
<https://doi.org/10.3389/fmicb.2019.01809>
- Samat, S., Kanyan Enchang, F., Nor Hussein, F., & Wan Ismail, W. I. (2017). Four-Week Consumption of Malaysian Honey Reduces Excess Weight Gain and Improves Obesity-Related Parameters in High Fat Diet Induced Obese Rats. *Evidence-Based Complementary and Alternative Medicine*, 2017. <https://doi.org/10.1155/2017/1342150>
- Shamala, T. R., Shri Jyothi, Y., & Saibaba, P. (2000). Stimulatory effect of honey on multiplication of lactic acid bacteria under in vitro and in vivo conditions. *Letters in Applied Microbiology*, 30(6), 453–455.
- Shin, D., Bohra, C., Kongpakpaisarn, K., & Lee, E. S. (2018). Increasing Trend in the Prevalence of Abdominal Obesity in the United States During 2001-2016. *Journal of the American College of Cardiology*, 71(11), A1737. [https://doi.org/10.1016/s0735-1097\(18\)32278-2](https://doi.org/10.1016/s0735-1097(18)32278-2)
- Shin, H.-S., & Ustunol, Z. (2005). Carbohydrate composition of honey from different floral sources and their influence on growth of selected intestinal bacteria: An in vitro comparison. *Food Research International*, 38(6), 721–728.
- Sivamaruthi, B. S., Kesika, P., Suganthy, N., & Chaiyasut, C. (2019). A Review on Role of Microbiome in Obesity and Antiobesity Properties of Probiotic Supplements. *Biomed Research International*, 2019.
- So, D., Whelan, K., Rossi, M., Morrison, M., Holtmann, G., Kelly, J. T., Shanahan, E. R., Staudacher, H. M., & Campbell, K. L. (2018). Dietary fiber intervention on gut microbiota composition in healthy adults : a systematic review and meta-analysis. *The American Journal of Clinical Nutrition*, 107(6), 965–983.
<https://doi.org/10.1093/ajcn/nqy041>
- Sun, H., Chen, Y., Cheng, M., Zhang, X., Zheng, X., & Zhang, Z. (2018). The modulatory effect of polyphenols from green tea, oolong tea and black tea on human intestinal microbiota in vitro. *Journal of Food Science and Technology*, 55(1), 399–407.
- Susmiati, S. (2019). Peran mikrobiota usus dalam perkembangan obesitas. *Majalah Kedokteran Andalas*, 42(1), 41.
<https://doi.org/10.25077/mka.v42.i1.p41-49.2019>
- Syamsul, T. D., Natzir, R., As'ad, S., Hadju, V., Hatta, M., Pratiwi, S., & Tenriola, A. (2020). The chemical composition of trigona honey in bone, south sulawesi. *Indian Journal of Public Health Research and Development*, 11(9), 258–263.
<https://www.embase.com/search/results?subaction=viewrecord&id=L2005086845&from=export%0Ahttp://dx.doi.org/10.37506/ijphrd.v11i9.1>

1018

- Tomastola, Y., Pascoal, M., & Kereh, P. (2013). *Dan Fructo Oligosakarida Terhadap Peningkatan Status Gizi Penderita Tuberculosis Paru Di Kota Manado*. 5(2), 94–107.
- VanVoorhis, C. R. W., & Morgan, B. L. (2007). Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology*, 3(2), 43–50.
- Wahid, S., & Miskad, U. A. (2016). *Imunologi Lebih Mudah Dipahami*. Surabaya: Brillan Internasional.
- Wang, M., Zhang, B., Hu, J., Nie, S., Xiong, T., & Xie, M. (2020). Intervention of five strains of *Lactobacillus* on obesity in mice induced by high-fat diet. *Journal of Functional Foods*, 72(May), 104078. <https://doi.org/10.1016/j.jff.2020.104078>
- WHO. (2000). *The Asia – Pacific perspective: redefining obesity and its treatment*. Health Communications Australia Pty.
- Yaacob, M., Rajab, N. F., Shahar, S., & Sharif, R. (2018). Stingless bee honey and its potential value: A systematic review. *Food Research*, 2(2), 124–133. [https://doi.org/10.26656/fr.2017.2\(2\).212](https://doi.org/10.26656/fr.2017.2(2).212)
- Zhang, S., Xu, M., Zhang, W., Liu, C., & Chen, S. (2021). Natural polyphenols in metabolic syndrome: Protective mechanisms and clinical applications. In *International Journal of Molecular Sciences* (Vol. 22, Issue 11). <https://doi.org/10.3390/ijms22116110>
- Zhang, X., Zhang, M., Ho, C.-T., Guo, X., Wu, Z., Weng, P., Yan, M., & Cao, J. (2018). Metagenomics analysis of gut microbiota modulatory effect of green tea polyphenols by high fat diet-induced obesity mice model. *Journal of Functional Foods*, 46, 268–277.
- Zulhairi Amin, F. A., Sabri, S., Ismail, M., Chan, K. W., Ismail, N., Mohd Esa, N., Mohd Lila, M. A., & Zawawi, N. (2020). Probiotic properties of *Bacillus* strains isolated from stingless bee (*Heterotrigona itama*) honey collected across Malaysia. *International Journal of Environmental Research and Public Health*, 17(1), 278.

