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PROBIOTICS MICROBES FOR OPTIMISING HEALTH

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REFERENCES

1. Hill C, Guarner F, Reid G, et al. Nat Rev Gastroenterol Hepatol. 2014;11(8):506-14.
2. Gibson GR, Hutkins R, et al. Nat Rev Gastroenterol Hepatol. 2017; 14(8):491-502.
3. Pandey KR, Naik SR, Vakil BV. J Food Sci Technol. 2015;52(12):7577-87.
4. Zheng J, Wittouck S, et al. Int J Syst Evol Microbiol. 2020;70(4):2782-858.
5. Lazo-Velez MA, Serna-Saldivar SO, et al. J Appl Microbiol. 2018;125(4):943-51.
6. Jezewska-Frackowiak J, Seroczynska K, et al. Acta Biochim Pol. 2018;65(4):509-19.
7. Ouwehand AC. Beneficial Microbes. 2017;8(2):143-51.
8. 8. Binda S, Hill C, Johansen E, et al. Front Microbiol. 2020;11:1662.
9. IPA. 2019 https://internationalprobiotics.org/wp-content/uploads/5-Essentials-for-a-Quality-Probiotic-Label-REV.pdf. (last checked 23rd Nov. 2020)
10. CRN, IPA. 2017 https://www.crnusa.org/sites/default/files/pdfs/CRN-IPA-Best-Practices-Guidelines-for-Probiotics.pdf. (last checked 23rd Nov. 2020)
11. Sanders ME, Merenstein D, et al. Nutr Bull. 2018;43(3):212-25.
12. Milani C, Duranti S, et al. Appl Environ Microbiol. 2013;79(14):4304-15.
13. Reid G, Gadir AA, Dhir R. Front Microbiol. 2019;10:424.
14. Morgan XC, Segata N, Huttenhower C. Trends Gen 2013;29(1):51-8.
15. Marco ML, Heeney D, et al. Curr Opin Biotechnol. 2017;44:94-102.
16. Smits LP, Bouter KE, et al. Gastroenterology. 2013;145(5):946-53.
17. Chang CJ, Lin TL, et al. J Food Drug Anal. 2019;27(3):615-22.
18. Buntyn JO, Schmidt TB, et al. Annu Rev Anim Biosci. 2016;4:335-55.

19. Martin R, Langella P. Front Microbiol. 2019;10:1047.
20. Collado MC, Vinderola G, Salminen S. Beneficial microbes. 2019;10(7):711-9.
21. Kleerebezem M, Binda S, et al. Curr Opin Biotechnol. 2018;56:55-60.
22. Guo Q, Goldenberg JZ, et al. Cochrane Database Syst Rev. 2019;4:CD004827.
23. Athalye-Jape G, Patole S. Microb Biotechnol. 2019;12(2):249-53.
24. King S, Glanville J, et al. Br J Nutr. 2014;112(1):41-54.
25. Goldenberg JZ, Yap C, et al. Cochrane Database Syst Rev. 2017;12:CD006095.
26. Wang L, Guo MJ, et al. Medicine. 2018;97(5):e9679.
27. Zhang M, Zhang C, et al. Microb Pathog. 2020;147:104403.
28. Jiang W, Ni B, et al. Paediatr Drugs. 2020;22(5):535-49.
29. Oak SJ, Jha R. Crit Rev Food Sci Nutr. 2018:1-9.
30. Li B, Liang L, et al. Front Pharmacol. 2020;11:332.
31. Jia K, Tong X, et al. Medicine. 2018;97(51):e13792.
32. Zhang C, Jiang J, et al. Clin Nutr. 2020.
33. Wang Z, He Y, Zheng Y. Int J Environ Res Public Health. 2019;16(20).
34. Xie HY, Feng D, et al. Cochrane Database Syst Rev. 2017;11:CD010496.
35. Zhang J, Ma S, et al. J Diabetes Res. 2019;2019:5364730.
36. Guvenc IA, Muluk NB, Respir Care. 2020;65(5):673-85.
37. Ong TG, Gordon M, et al. Cochrane Database Syst Rev. 2019;3:CD012473.
38. Rittiphairoj T, Pongpirul K, et al. Adv Nutr. 2020. ahead of print
39. Gruner D, Paris S, Schwendicke F. J Dent. 2016;48:16-25.
40. Wang ZB, Xin SS, et al. Evid Based Complement Alternat Med. 2019;2019:3862971.
41. Ikram S, Hassan N, et al. J Investig Clin Dent. 2018;9(3):e12338.
42. Akram Z, Shafqat SS, et al. Aust Dent J. 2020;65(1):12-20.
43. Zhang N, Zhang Y, et al. Brain Behav. 2020:e01699.
44. Ejtahed HS, Ardeshirlarijani E, et al. J Diabetes Metab Disord. 2020;19(1):617-23.
45. Neri LCL, Taminato M, Silva Filho L. J Ped Gastroenterol Nutr. 2019;68(3):394-9.
46. Canales J, Rada G. Medwave. 2018;18(2):e7186.
47. Tian X, Pi YP, et al. Front Pharmac. 2018;9:690.
48. Tapiovaara L, Lehtoranta L, et al. Beneficial microbes. 2016;7(2):161-9.
49. Lenoir-Wijnkoop I, Merenstein D, et al. Front Pharmacol. 2019;10:980.