

เอกสารอ้างอิง: ฝรั่งกับโรคเบาหวาน 42(3)

1. กรมหม่อนไหม. ฝรั่ง. [อินเทอร์เน็ต]. [เข้าถึงเมื่อ 30 เมษายน 2568]. เข้าถึงจาก https://qsds.go.th/newqssccpn/wp-content/uploads/sites/99/2018/12/51.Guava_.pdf
2. Mueller-Oerlinghausen B, Ngamwathana W, Kanchanapee P. Investigation into Thai medicinal plants said to cure diabetes. J Med Ass Thailand. 1971;54(2):105-11.
3. นันทวัน บุญยะประภัศร และอรนุช โชคชัยเจริญพร, บรรณาธิการ. สมุนไพร..ไม้พื้นบ้าน (3). กรุงเทพฯ: บริษัท ประชาชน จำกัด;2542.
4. Ugbogu EA, Emmanuel O, Uche ME, Dike ED, Okoro BC, Ibe C, et al. The ethnobotanical, phytochemistry and pharmacological activities of *Psidium guajava* L. Arabian J Chem. 2022; 15(5):103759. doi: 10.1016/j.arabjc.2022.103759.
5. Kumar M, Tomar M, Amarowicz R, Saurabh V, Nair MS, Maheshwari C, et al. Guava (*Psidium guajava* L.) leaves: nutritional composition, phytochemical profile, and health-promoting bioactivities. Foods. 2021;10:752. doi: 10.3390/foods10040752.
6. Biswas S, Talukdar P, Talapatra SN, Presence of phytochemicals in fruits and leaves of guava (*Psidium guajava* Linn.) for cancer prevention: A mini review. J Drug Deliv Ther. 2019;9(4-s):726-9. doi: 10.22270/jddt.v9i4-s.3290.
7. Ngbolua KN, Lufuluabo LG, Moke LE, Bongo G, Liyongo CI, Ashande CM, et al. A review on the phytochemistry and pharmacology of *Psidium guajava* L. (Myrtaceae) and future direction. Discov Phytomed. 2017;5(1):7-13. doi: 10.15562/phytomedicine.2018.58.
8. Kaushik A. Effects of developed guava seeds biscuit on blood glucose level of type 2 diabetes patients. J Pharmacogn Phytochem. 2019;SP5:57-8.
9. Krishna PV, Mogana PR. Effectiveness of guava leaf tea in reducing postprandial blood glucose among type -2 diabetic clients. Int J Midwifery Nurs Pract. 2021;4(2):40-2.
10. Jayasudha P, Chitra W, Nirmala T. Effect of guava leaf tea on blood sugar level among clients with type ii diabetes mellitus at a selected community, Coimbatore. Int J Appl Res. 2017;3(11):218-20.
11. Ismawanti Z, Suparyatmo JB, Wiboworini B. The comparative effect of red guava (*Psidium guajava* L.) with papaya (*Carica papaya*) on blood glucose level of type 2-diabetic patients. Rom J Diabetes Nutr Metab Dis. 2020;27(3):209-13. doi: 10.46389/rjd-2020-1032.

12. Kumari S, Rakavi R, Mangaraj M. Effect of guava in blood glucose and lipid profile in healthy human subjects: a randomized controlled study. *J Clin Diagn Res.* 2016;10(9):BC04-BC07. doi: 10.7860/JCDR/2016/21291.8425.
13. Konig A, Schwarzingler B, Stadlbauer V, Lanzerstorfer P, Iken M, Schwarzingler C, et al. Guava (*Psidium guajava*) fruit extract prepared by supercritical CO₂ extraction inhibits intestinal glucose resorption in a double-blind, randomized clinical study. *Nutrients.* 2019;11(7):1512. doi: 10.3390/nu11071512.
14. อีระ พิวงเงิน, วัลลภ จันทรสว่าง. การลดการดูดซับกลูโคสของน้ำยาบ้วนปากใบฝรั่งในผู้ป่วยเบาหวาน. *ว.เภสัชศาสตร์อีสาน.* 2562;15(3):95-103.
15. Asnanar WOS, Maryunis. Effectiveness of guava leaves decoction water on wound healing diabetic ulcers. *The 3rd international conference on halal policy culture and sustainability issues.* 2021;3(1):23.
16. Harahap YW, Nurlaila N, Butar-Butar K, Antoni A, Anto A. Self-care training for wound diabetic foot using guava leaves decoction. *ABDIMAS: Jurnal Pengabdian Masyarakat.* 2022;5(1):2129-33.
17. Purba RAP, Paengkoum P. Farang (*Psidium guajava* L.) dried leaf extracts: phytochemical profiles, antioxidant, anti-diabetic, and anti-hemolytic properties for ruminant health and production. *Molecules.* 2022;27:8987. doi: 10.3390/molecules27248987.
18. Hamza AA, Ksiksi TS, Shamsi OAAI, Balfaqh SA. α -glucosidase inhibitory activity of common traditional medicinal plants used for diabetes mellitus. *J Develop Drugs.* 2015;4(5):1000144. doi: 10.4172/2329-6631.1000144.
19. Hsu YP, Chen WY, Hsieh PC, Chu YL. Functional assessments of *Psidium guajava* L. and *Morus alba* L. leaf extracts on postprandial glucose control. *Food Sci Nutr.* 2024;12(7):5250-66. doi: 10.1002/fsn3.4175.
20. Liu CW, Wang YC, Lu HC, Chiang WD. Optimization of ultrasound-assisted extraction conditions for total phenols with anti-hyperglycemic activity from *Psidium guajava* leaves. *Process Biochem.* 2014;49(10):1601-5. doi: 10.1016/j.procbio.2014.06.009.
21. Luo Y, Peng B, Liu Y, Wu Y, Wu Z. Ultrasound extraction of polysaccharides from guava leaves and their antioxidant and antiglycation activity. *Process Biochem.* 2018;73:228-34. doi: 10.1016/j.procbio.2018.08.003.

22. Ngo DH, Vo TS. The role of *Psidium guajava* leaves as a functional agent for anti-diabetic therapeutics. *Int J Pharm Phytopharm Res.* 2019;9(6):121-8.
23. Deepa J, Aleykutty NA, Jyoti H. Effect of combination of two plant extracts on diabetes mellitus. *Int J Pharm Pharm Sci.* 2018;10(4):49-52.
24. Kumar K, Khan H, Dulta K, Farooq U, Khan MA. Evaluation of *in vitro* anti-diabetic and anti-lipidemic activity of medicinal plants. 2021;2:1317-30.
25. Anand S, Arasakumari M, Prabu P, Amalraj AJ. Anti-diabetic and aldose reductase inhibitory potential of *Psidium guajava* by *in vitro* analysis. *Int J Pharm Pharm Sci.* 2016;8(9):271-6. doi: 10.22159/ijpps.2016.v8i9.13532.
26. Eidenberger T, Selg M, Krennhuber K. Inhibition of dipeptidyl peptidase activity by flavonol glycosides of guava (*Psidium guajava* L.): a key to the beneficial effects of guava in type II diabetes mellitus. *Fitoterapia.* 2013;89:74-9. doi: 10.1016/j.fitote.2013.05.015.
27. Yu Y, Sun XY, Xu KL, Ma J, Zang YD, Li CJ, et al. Meroterpenoids with inhibitory activity of PTP1B from the fruits of *Psidium guajava*. *Tetrahedron.* 2022;113: 132762. doi: 10.1016/j.tet. 2022.132762.
28. Choi E, Baek S, Baek K, Kim HK. *Psidium guajava* L. leaf extract inhibits adipocyte differentiation and improves insulin sensitivity in 3T3-L1 cells. *Nutr Res Pract.* 2021;15(5): 568-78. doi: 10.4162/nrp.2021.15.5.568.
29. Liu CW, Wang YC, Hsieh CC, Lu HC, Chiang WD. Guava (*Psidium guajava* Linn.) leaf extract promotes glucose uptake and glycogen accumulation by modulating the insulin signaling pathway in high-glucose-induced insulin-resistant mouse FL83B cells. *Process Biochem.* 2015;50(7):1128-35. doi: 10.1016/j.procbio.2015.03.022.
30. Chu S, Zhang F, Wang H, Xie L, Chen Z, Zeng W, et al. Aqueous extract of guava (*Psidium guajava* L.) leaf ameliorates hyperglycemia by promoting hepatic glycogen synthesis and modulating gut microbiota. *Front Pharmacol.* 2022;13:907702. doi: 10.3389/fphar.2022.907702.
31. Cheng FC, Shen SC, Wu JS. Effect of guava (*Psidium guajava* L.) leaf extract on glucose uptake in rat hepatocytes. *J Food Sci.* 2009;74(5):H132-8. doi: 10.1111/j.1750-3841.2009.01149.x.

32. Kaewnarin K, Niamsup H, Shank L, Rakariyatham N. Antioxidant and antiglycation activities of some edible and medicinal plants. *Chiang Mai J Sci.* 2014;41(1):105-16.
33. Eze UN, Eze AA, Ugwu CV, Onuoha M, Ubenyi SM, Olunuga OA. Anti-hyperglycemic effects of *Psidium guajava* Linn crude leaf extracts and fractions in alloxan- induced diabetic mice. *J Chem Nutr Biochem.* 2021;2(2):1-27. doi: 10.48185/jcnb.v2i2.283.
34. Soman S, Rajamanickam C, Rauf AA, Madambath I. Molecular mechanisms of the antiglycative and cardioprotective activities of *Psidium guajava* leaves in the rat diabetic myocardium. *Pharm Biol.* 2016;54(12):3078-85. doi: 10.1080/13880209.2016.1207090.
35. Manikandan R, Anand AV, Sampathkumar P, Manoharan N. Protective effect of *Psidium guajava* leaf ethanolic extract against streptozotocin-induced diabetes and lipidosis in rats. *Indian J Anim Res.* 2018;52(8):1198-205. doi: 10.18805/ijar.B-3337.
36. Rajput R, Kumar K. Protective effect of ethanolic extract of guava leaves (*Psidium guajava* L.) in alloxan-induced diabetic mice. *Materials Today: Proceedings.* 2021;47:437-9. doi: 10.1016/j.matpr.2021.04.617.
37. Mazumdar S, Akter R, Talukder D. Antidiabetic and antidiarrhoeal effects on ethanolic extract of *Psidium guajava* (L.) Bat. leaves in Wister rats. *Asian Pac J Trop Biomed.* 2015;5(1):10-4.
38. Hedayathullah Khan HB, Shanmugavalli R, Rajendran D, Bai MR, Sorimuthu S. Protective effect of *Psidium guajava* leaf extract on altered carbohydrate metabolism in streptozotocin-induced diabetic rats. *J Diet Suppl.* 2013;10(4):335-44. doi: 10.3109/19390211.2013.830677.
39. Huang Z, Luo Y, Xia X, Wu A, Wu Z. Bioaccessibility, safety, and antidiabetic effect of phenolic-rich extract from fermented *Psidium guajava* Linn. leaves. *J Funct Foods.* 2021;86: 104723. doi: 10.1016/j.jff.2021.104723.
40. Belgis B. Effects of *Psidium guajava* crude leaf methanol-extract on lowering blood sugar levels in rat. *OBAT: Jurnal Riset Ilmu Farmasi dan Kesehatan.* 2023;1(6):124-30. doi: 10.61132/obat.v1i6.268.
41. (Shabbir et al, 2020) Shabbir H, Kausar T, Noreen S, Rehman HU, Hussain A, Huang Q, et al. *In vivo* screening and antidiabetic potential of polyphenol extracts from guava pulp, seeds and leaves. *Animals.* 2020;10(9):1714. doi: 10.3390/ani10091714.

42. Jayachandran M, Vinayagam R, Xu B. Guava leaves extract ameliorates STZ induced diabetes mellitus via activation of PI3K/AKT signaling in skeletal muscle of rats. *Mol Biol Rep.* 2020;47(4):2793-99. doi: 10.1007/s11033-020-05399-2.
43. Xu C, Li X, Zeng D, Liu Y, Gao Y, Tsunoda M, et al. Amino acid profiling study of *Psidium guajava* L. leaves as an effective treatment for type 2 diabetic rats. *Evid Based Complement Alternat Med.* 2020;9784382. doi: 10.1155/2020/9784382.
44. Yang Q, Wen YM, Shen J, Chen MM, Wen JH, Li ZM, et al. Guava leaf extract attenuates insulin resistance via the PI3K/Akt signaling pathway in a type 2 diabetic mouse model. *Diabetes Metab Syndr Obes.* 2020;13:713-8. doi: 10.2147/DMSO.S231979.
45. Nagaraja S, Ahmed SS, Bharathi DR, Goudanavar P, Rupesh Kumar M, Fattepur S, et al. Green synthesis and characterization of silver nanoparticles of *Psidium guajava* leaf extract and evaluation for its antidiabetic activity. *Molecules.* 2022;27(14):4336. doi: 10.3390/molecules 27144336.
46. Luo Y, Peng B, Wei W, Tian X, Wu Z. Antioxidant and anti-diabetic activities of polysaccharides from guava leaves. *Molecules.* 2019;24(7):1343. doi: 10.3390/molecules 24071343.
47. Bagri P, Ali M, Aeri V, Bhowmik M. Isolation and antidiabetic activity of new lanostenoids from the leaves of *Psidium guajava* L. *Int J Pharm Pharm Sci.* 2016;8(9):14-8. doi: 10.22159/ijpps.2016v8i9.10425.
48. Huang CS, Yin MC, Chiu LC. Antihyperglycemic and antioxidative potential of *Psidium guajava* fruit in streptozotocin-induced diabetic rats. *Food Chem Toxicol.* 2011;49(9):2189-95. doi: 10.1016/j.fct.2011.05.032.
49. Li PY, Hsu CC, Yin MC, Kuo YH, Tang FY, Chao CY. Protective effects of red guava on inflammation and oxidative stress in streptozotocin-induced diabetic mice. *Molecules.* 2015;20(12):22341-50. doi: 10.3390/molecules201219831.
50. Joshua PE, Iloka OC, Okeke ES, Aham EC, Oka SA, Onyemuche TN, et al. Antidiabetic and hepatoprotective effects of *Psidium guajava* L fruit puree on alloxan-induced diabetes in Wistar rats. *Trop J Nat Prod Res.* 2022;6(5):795-800.
51. Becerra-Verdin EM, Morales Avila UM, Garcia-Galindo HS, Montalvo-Gonzalez R, Castaneda-Martinez A, Montalvo-Gonzalez E. Evaluation of biochemical markers in diabetic rats fed

- diets supplemented with fruit purees. *CYTA-J Food*. 2019;17(1):307-15. doi: 10.1080/19476337.2019.1578267.
52. Issa R, Khater S, Abu-Samak M. A comparative evaluation of microwave and conventional soxhlet extraction methods for the antioxidant, hypoglycemic and hypolipidemic potentials of Jordanian *Psidium guajava* raw fruit peel extracts. *Res J Phytochem*. 2017;11(1):20-7. doi: 10.3923/rjphyto.2017.20.27.
53. Farinazzi-Machado FM, Guiguer EL, Barbalho SM, de Souza MD, dos Santos Bueno PC, Gregorio C, et al. Effects of *Psidium guajava* on the metabolic profile of Wister rats. *J Med Plants Res*. 2012;6(18):3450-4. doi: 10.5897/JMPR12.033.
54. Maigoda TC, Siregar A, Podojoyo, Ridhowati S, Krisnasary A. Wound healing and blood sugar effect of *Psidium guajava* L. leaves and *Melastoma malabathricum* L. leaves on rats with diabetic foot ulcer. *J Applied Sci*. 2019;19(4):287-94. doi: 10.3923/jas.2019.287.294.
55. Jaya kumari S. Formulation and evaluation of herbal gel from tannin-enriched fraction of *Psidium guajava* Linn. leaves for diabetic wound healing. *Int J Green Pharm*. 2018;12(3): S490-S496.
56. เอมมนัส อุตตวิชัย, ปราณี ขวลิตรำรง, พืช รักษามั่น, ปราณี จันทเพ็ชร. การศึกษาพิษของใบฝรั่ง. *ว กรรมวิทย์ พ*. 2538;37(4):289-305.
57. Jaiarj P, Khoohaswan P, Wongkrajang Y, Peungvicha P, Suriyawong P, Saraya MS, et al. Anticough and antimicrobial activities of *Psidium guajava* Linn. leaf extract. *J Ethnopharmacol*. 1999;67(2):203-12. doi: 10.1016/S0378-8741(99)00022-7.
58. Jaiarj P. Acute and subacute toxicity and antimicrobial activity of *Psidium guajava* L. extracts. Mahidol university annual research abstracts. Bangkok: Mahidol Univ Press, 1986.
59. Kulkarni AR, Kulkarni VH, Shastry CS, Sateesh B, Hukkeri VI, Marihal SC. Screening of guava leaves extracts for analgesic, antiinflammatory and antiulcer activity in albino rats. *Indian Drugs*. 1999;36(6):363-7.
60. Yadav BV, Bodhankar SL, Dhaneshwar SR. Antihyperglycaemic activity of ethanol extract of *Psidium guajava* leaves in alloxan induced diabetic mice. *Pharmacologyonline*. 2008;1:474-85.

61. Deguchi Y, Osada K, Watanuki M. Effect of guava leaf extract in combination with acarbose or voglibose on increased blood glucose level in sugar-loaded normal mice. *J Jpn Soc Nutr Food Sci.* 2003;56(4):207-12.
62. Chatuphonprasert W, Jarukamjorn K. Impact of six fruits-banana, guava, mangosteen, pineapple, ripe mango and ripe papaya-on murine hepatic cytochrome P450 activities. *J Appl Toxicol.* 2012;32:994-1001. doi:10.1002/jat.2740.
63. Larson EC, Hathaway LB, Lamb JG, Pond CD, Rai PP, Matainaho TK, et al. Interactions of Papua New Guinea medicinal plant extracts with antiretroviral therapy, *J Ethnopharmacol.* 2014;155(3):1433-40. doi:10.1016/j.jep.2014.07.023.
64. Kaneko K, Suzuki K, Iwadata-Iwata E, Kato I, Uchida K, Onoue M. Evaluation of food-drug interaction of guava leaf tea. *Phytother Res.* 2013;27:299-305. doi:10.1002/ptr.4724.
65. Wang HJ, Pao LH, Hsiong CH, Shih TY, Lee MS, Hu OY. Dietary flavonoids modulate CYP2C to improve drug oral bioavailability and their qualitative/quantitative structure-activity relationship. *AAPS J.* 2014;16(2):258-68. doi:10.1208/s12248-013-9549-4.
66. Alnaqeeb M, Mansor KA, Mallah EM, Ghanim BY, Idkaidek N, Qinna NA. Critical pharmacokinetic and pharmacodynamic drug-herb interactions in rats between warfarin and pomegranate peel or guava leaves extracts. *BMC Complement Altern Med.* 2019;19:29. doi: 10.1186/s12906-019-2436-5.
67. Ogikubo T, Hidaka M, Okumura M, Fujita K, Yamasaki K, Asai M, et al. Inhibitory effect of tea beverages on human cytochrome P450 3A (CYP 3A) activity. *Jpn J Pharm Health Care Sci.* 2006;32(5):392-9. doi:10.5649/jjphcs.32.392.
68. Matsuda K, Nishimura Y, Kurata N, Iwase M, Yasuhara H. Effects of continuous ingestion of herbal teas on intestinal CYP3A in the rat. *J Pharmacol Sci.* 2007;103(2):214-21.