## Editorial

## **Thai Medicinal Treatment Theory in Hypertension**

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In Thai traditional medicine hypertension or high blood pressure is understood through the lens of imbalance in the body's elements and energies. The treatment approach typically involves a combination of herbal remedies, dietary adjustments, lifestyle modifications, and sometimes therapeutic practices like Thai massage or meditation. Here are some key aspects for the treatment of hypertension in Thai traditional theory:

1. Herbal Remedies - Thai traditional medicine utilizes various herbs and herbal formulations that are believed to help balance the body's energies and support cardiovascular health, such as Centella asiatica (Gotu kola), Andrographis paniculata (King of Bitters), and Orthosiphon stamineus (Java tea).

2. Dietary Modifications - A key component of treatment involves dietary adjustments aimed at reducing sodium intake and promoting a diet rich in fresh fruits, vegetables, lean proteins, and whole grains. Certain herbs and spices are also recommended to be integrated into cooking for their health-promoting properties.

3. Lifestyle Changes - Thai traditional medicine emphasizes lifestyle modifications including regular physical activity, stress reduction techniques (such as meditation or mindfulness practices), and adequate sleep to support overall health, as well as manage hypertension.

4. Therapeutic Practices - Traditional Thai massage (Nuad-Thai) and therapeutic Thai herbal compress (Luk-Pra-Kob) are sometimes used to promote circulation, reduce muscle tension, and support relaxation, which may indirectly help in managing hypertension.

5. Energy Balancing - Practitioners of Thai traditional medicine often focus on balancing the body's energy channels and imbalance of four elements (e.g., fire, wind, water and earth) believed to contribute to hypertension.

6. Individualized Approach - Treatment plans in Thai traditional medicine are often tailored to the individual's specific constitution, symptoms, and risk factors of hypertension. This personalized approach may involve a combination of different herbs and therapies based on the practitioner's assessment.

Several herbs are known for their benefits in managing hypertension. It's important to note that while some herbs may show promise in clinical studies, their effectiveness and safety can vary, and they should be used cautiously and preferably under medical supervision. Here are some herbs commonly used or studied for their potential effects on hypertension:

1. Garlic (*Allium sativum*) - Known for its cardiovascular benefits, garlic may help lower blood pressure due to its ability to widen blood vessels and improving circulation,<sup>1</sup>

2. Hawthorn (*Crataegus pinnatifida*)-Often used in traditional medicine for heart health, hawthorn may help dilate blood vessels and improve blood flow, potentially lowering blood pressure,<sup>2</sup>

3. Hibiscus (*Hibiscus sabdariffa*)-Hibiscus tea has been studied for its antihypertensive effects by increasing urination, possibly due to its antioxidant properties and ability to relax blood vessels,<sup>3</sup>

Volume 24, Issue 2, Page 7-8 CC BY-NC-ND 4.0 license https://asianmedjam.com

Department of Applied Thai Traditional Medicine, Faculty of Medicine, Thammasat University, Pathum Thani 12120, Thailand \*Corresponding author: Pannawat Chaiyawatthanananthn, Ph.D., Department of Applied Thai Traditional Medicine, Faculty of Medicine, Thammasat University, Pathum Thani 12120, Thailand, Email: pannawat@tu.ac.th 4. Cinnamon (*Cinnamomum verum*)-While more commonly associated with blood sugar control, cinnamon may also have a modest effect on blood pressure reduction,<sup>4</sup>

5. Ginger (*Zingiber officinale*) - Known for its anti-inflammatory properties, ginger may help lower blood pressure by improving blood circulation and relaxing muscles surrounding blood vessels,<sup>5</sup>

6. Turmeric (*Curcuma longa*) – Contains curcumin, which has antioxidant and anti-inflammatory properties that may contribute to cardiovascular health,<sup>6</sup>

7. Basil (*Ocimum basilicum*) - Contains eugenol, which may help lower blood pressure by dilating blood vessels,<sup>7</sup>

8. Cardamom (*Elettaria cardamomum*)-Often used in traditional medicine, cardamom may help lower blood pressure due to its antioxidant properties and potential diuretic effects,<sup>8</sup>

9. French lavender (*Lavandula stoechas*) - Known for its calming effects, lavender may help reduce stress and anxiety, which can contribute to lowering blood pressure,<sup>9</sup>

10. Celery seed (*Apium graveolens*)-Contains compounds that may help lower blood pressure by relaxing the muscles in and around arterial walls,<sup>10</sup>

It's crucial to consult with a healthcare provider before using herbs for hypertension. This precaution is especially important if you are already taking medication or have other health conditions. Herbal remedies should not replace prescribed medications without medical guidance, as they may interact with medications or have unintended effects. The collaboration between traditional and modern medicine can offer a combined strategy for managing hypertension effectively and safely.

## References

- Ried K, Fakler P. Potential of garlic (Allium sativum) in lowering high blood pressure: mechanisms of action and clinical relevance. *Integr Blood Press Control.* 2014;7:71-82. doi:10.2147/IBPC.S51434
- 2. Walker AF, Marakis G, Simpson E, et al. Hypotensive effects of hawthorn for patients with diabetes taking prescription drugs: a randomised controlled trial. *Br J Gen Pract.* 2006;56(527):437-443.

- 3. Mozaffari-Khosravi H, Jalali-Khanabadi BA, Afkhami-Ardekani M, Fatehi F, Noori-Shadkam M. The effects of sour tea (Hibiscus sabdariffa) on hypertension in patients with type II diabetes. *J Hum Hypertens*. 2009;23(1):48-54. doi:10.1038/jhh.2008.100
- Akilen R, Tsiami A, Devendra D, Robinson N. Glycated haemoglobin and blood pressure-lowering effect of cinnamon in multi-ethnic Type 2 diabetic patients in the UK: a randomized, placebo-controlled, double-blind clinical trial. *Diabet Med.* 2010;27(10):1159-1167. doi:10.1111/j.1464-5491.2010.03079.x
- Mozaffari-Khosravi H, Talaei B, Jalali BA, Najarzadeh A, Mozayan MR. The effect of ginger powder supplementation on insulin resistance and glycemic indices in patients with type 2 diabetes: a randomized, doubleblind, placebo-controlled trial. *Complement Ther Med.* 2014;22(1):9-16. doi:10.1016/j. ctim.2013.12.017
- Aggarwal BB, Sundaram C, Malani N, Ichikawa H. Curcumin: the Indian solid gold. *Adv Exp Med Biol*. 2007;595:1-75. doi:10.1007/978-0-387-46401-5\_1
- Bathaie SZ, Miri H, Mohagheghi MA, Mokhtari-Dizaji M, Shahbazfar AA. Review of the evidence for potential therapeutic effects of basil (Ocimum basilicum) in the treatment of hypertension. *J Integr Med.* 2019;17(5):283-295. doi:10.1016/j.joim.2019.05.005
- Verma SK, Jain V, Katewa SS. Blood pressure lowering, fibrinolysis enhancing and antioxidant activities of cardamom (Elettaria cardamomum). *Indian J Biochem Biophys*. 2009;46(6):503-506.
- Braden R, Reichow S, Halm MA. The use of the essential oil lavandin to reduce preoperative anxiety in surgical patients. *J Perianesth Nurs*. 2009;24(6):348-355. doi:10.1016/j. jopan.2009.10.003
- Njie MA, Siddiqui NA, Tarawally A, et al. Comparative effects of Apium graveolens and its combination with metformin on serum lipids, glucose and hepatic enzymes of type II diabetic model rats. *Am J Biomed Sci Res.* 2020;9(3):199-208.