GOVERNMENT OF INDIA MINISTRY OF HEALTH AND FAMILY WELFARE DEPARTMENT OF HEALTH RESEARCH

LOK SABHA UNSTARRED QUESTION NO. 3302 TO BE ANSWERED ON 08TH AUGUST, 2025

MEDICINAL BENEFITS OF TURMERIC

3302. SHRI ARVIND DHARMAPURI:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

- (a) whether the Government has conducted any research on the medicinal benefits/properties of turmeric and if so, the findings of the research thereof;
- (b) whether the Government has developed adequate research infrastructure for turmeric and other medicinal crops in the country and if so, the details of the infrastructure developed in this regard;
- (c) whether the Government has conducted any research on adverse effects linked to turmeric consumption, especially the risk of liver injury, blood thinning, digestive upset and similar reactions and if so, the details thereof;
- (d) whether the Government has prepared/maintains a database of all allopathic and ayurvedic medicines that contain turmeric as a component along with their respective uses;
- (e) if so, the details thereof and if not, the reasons therefor; and
- (f) whether the Government has conducted any assessment/research on the percentage of curcumin ideal for the turmeric to be used in pharmalogical use and the States which are producing turmeric with the ideal level of curcumin and if so, the details thereof?

ANSWER THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRI PRATAPRAO JADHAV)

(a), (d) and (e): Indian Council of Medical Research (ICMR) has informed that it has prepared monographs on Turmeric (Curcuma longa) containing information on medicinal properties and relevant research data pertaining to phytochemicals, pharmacological research, bioactivities, adverse effects etc.

Indian Council of Agricultural Research (ICAR) has informed that Indian Institute of Spices Research (ICAR-IISR), Kozhikode conducted research on antidiabetic properties of bi-herbal extract containing turmeric and cinnamon in animal model. The result showed that administration of the bi-herbal extract at 150mg/g body weight significantly reduced the blood glucose level of diabetic animals. The treatment also resulted in the reduction of cholesterol levels. The histopathological examination of tissues showed the improvement in pancreatic architecture and restoration of tissue integrity in liver and kidney.

The Central Council for Research in Ayurvedic Sciences (CCRAS) has informed that it has been generating evidence of 22 classical formulations containing turmeric studied on 15 disease conditions. The findings suggested that these formulations are safe and effective in corresponding disease conditions. Details are given in Annexure.

(b): Indian Council of Agricultural Research (ICAR) has informed that Indian Institute of Spices Research (ICAR-IISR), Kozhikode has adequate research infrastructure for turmeric like field gene bank and sophisticated laboratories to analyse the quality constituents of turmeric. Similarly, ICAR-Directorate of Medicinal and Aromatic Plants Research, Anand and ICAR-Indian Institute of Horticulture Research, Bengaluru have adequate research infrastructure for other medicinal crops.

Agharkar Research Institute (ARI), Pune, an autonomous institute under the Department of Science and Technology (DST) has informed that it has dedicated medicinal plant research facility, which includes tissue culture, molecular biology, phytochemistry and microbiology laboratories.

- (c): Indian Council of Agricultural Research (ICAR) has informed that Indian Institute of Spices Research (ICAR-IISR), Kozhikode has conducted animal study to analyse the effect of cinnamon and turmeric extract on growth, blood parameters and metabolic enzyme activities. The results showed significant increase in liver catalase activity and no significant changes in Lactate Dehydrogenase (LDH), Malate Dehydrogenase (MDH), Alanine Aminotransferase (ALT) and Aspartate Aminotransferase (AST). No abnormalities like liver injury, blood thinning, digestive upset etc. were observed.
- (f): Indian Council of Agricultural Research (ICAR) has further informed that Indian Institute of Spices Research (ICAR-IISR), Kozhikode has conducted detailed assessment of curcumin content of various turmeric varieties. Several varieties with high curcumin content (above 5%) like IISR Prathibha, IISR Pragati, Alleppey Supreme, Roma, Rajendra Sonia etc. have been released for cultivation. These varieties have been adopted by turmeric farmers in several states. In addition, Geographical Indications (GI)-tagged varieties like Lakadong turmeric from North-Eastern states and Waigaon turmeric from Maharashtra are also cultivated for their higher curcumin content. Therefore, the availability of high curcumin varieties is not restricted to particular states or regions.

Annexure

Disease-wise formulations* validated under clinical research projects till 31st March, 2025, which contain Turmeric as a component/ingredient.

| S.No. | Name of the disease condition | Name of the Ayurveda formulation |
|-------|--|----------------------------------|
| 1. | Agnimandya | 1. Pippaladyasava |
| 2. | Allergic Conjunctivitis | 2. Haridrakhand |
| 3. | Cognitive Deficit | 3. Kalyanaka Ghrita |
| 4. | Type II Diabetes Mellitus | 4. Saptavimshatika Guggulu |
| | | 5. Haridra Churna, |
| | | 6. Nisa Amalaki Churna tablet |
| | | 7. Chandraprabha vati |
| | | 8. Nishakatakadi Kashaya, |
| 5. | Eczema (Vicharchika) | 9. Nalpamaradi Taila |
| 6. | Essential Hypertension | 10. Ashvagandhadyarishta, |
| 7. | Fissure-in-ano (Parikartika) | 11. Jatyadi Ghrita |
| | | 12. Jatyadi Taila |
| 8. | Hyperuricemia in Gout patients (Vatarakta) | 13. Nimbadi Churna |
| 9. | Iron Deficiency Anemia | 14. Punarnavadi Mandura |
| 10. | Mental Retardation | 15. Brahma Rasayana |
| 11. | Migraine (Ardhavabhedaka) | 16. Pathyadi Kvatha Churna |
| 12. | Psoriasis (Kitibha) | 17. Panchtiktaguggulu Ghrita |
| | | 18. Brihanmarichadya Taila |
| | | 19. Nalpamaradi Taila |
| 13. | Rasayana | 20. Brahma Rasayana |
| 14. | Urolithiasis | 21. Chandraprabha vati |
| 15. | Yuvan Pidika (Acne) | 22. Nimbadi Churna |

^{*}Some formulations repeated in different disease conditions or in different combinations {Source: Central Council for Research in Ayurvedic Sciences (CCRAS) inputs}
