



This occasional section within the journal surveys visions and achievements, often not on the main track of the developing biomedical sciences, but all relating to discoveries and developments of medicinals – both ancient and modern. What they have in common, in one way or another, is providing further background and glances around the edges of the core discipline of pharmacognosy, as it has been and continues to evolve within our times.

Green Tea Consumption may Protect against Cancer

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A recent report in Nature Communications highlighted the potential of epigallocatechin gallate (EGCG), a common component in green tea, for its ability to protect against some cancers.¹ The ability of EGCG to induce apoptosis in cancer cells is well known, although the apoptotic mechanism(s) were relatively poorly understood. For the first time, this study reported that EGCG directly interacts with the p53 tumour suppressor via the N-terminal domain of the protein. The EGCG-p53 interaction inhibits the ability of p53 to interact with E3 ligase MDM2, thereby inhibiting p53 ubiquitination. This subsequently stabilises p53

and enhances its anti-tumour activity. This study therefore not only highlights the anti-cancer activity of EGCG, but also identifies the p53 N-terminal domain as a target for the development of novel anticancer therapeutics.

REFERENCES

1. Zhao J, Blayney A, Liu X, Gandy L, Jin W, Yan L, *et al.* EGCG binds intrinsically disordered N-terminal domain of p53 and disrupts p53-MDM2 interaction. *Nat Commun.* 2021;12(1):986. doi: 10.1038/s41467-021-21258-5, PMID 33579943.