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Sommario/riassunto	Plant-based diets contain a plethora of metabolites that may impact on health and disease prevention. Most are focused on the potential bioactivity and nutritional relevance of several classes of phytochemicals, such as polyphenols, flavonoids, carotenoids, phyto-oestrogens, and frucrooligo-saccharides. These compounds are found in fruit, vegetables, and herbs. Daily intakes of some of these compounds may exceed 100 mg. Moreover, intestinal bacterial activity may transform complex compounds such as anthocyanins, procyanidins, and isoflavones into simple phenolic metabolites. The colon is thus a rich source of potentially active phenolic acids that may impact both locally and systemically on gut health. Further, nondigestible fiber (prebiotics) are dietary substrates that selectively promote proliferation and/or activity of health-promoting bacterial populations in the colon. Prebiotics, such as inulin, raffinose, and stachyose, have a proven ability to promote the abundance of intestinal bacterial populations, which may provide additional health benefits to the host. Further, various pulse seed soluble (fiber) extracts are responsible for improving gastrointestinal motility, intestinal functionality and morphology, and mineral absorption. Studies indicated that the consumption of seed origin soluble extracts can

upregulate the expression of BBM proteins that contribute for digestion and absorption of nutrients.