

being associated with reports of liver damage related to the ingredient hydroxycitric acid – an ingredient in garcinia cambogia products or dietary supplements. Given these risks, harms and burdens of garcinia cambogia were judged to outweigh the limited potential benefit.

No statistically significant weight loss was found with the use of green tea versus placebo across the two studies reviewed.[\[172,173\]](#) Limitations included that comparators were not the same between subject groups. Green tea was used in conjunction with other supplements, making it unclear whether green tea specifically had any effect.

Statistically significant weight loss was seen in one small RCT (n=60) looking at phaseolus vulgaris over 12 weeks with an MD in weight loss of 1.7 kg between phaseolus vulgaris and control.[\[174\]](#) Phaseolus vulgaris is also known as the common bean, green bean, and French bean. Adverse events were not severe, not serious, and not related to the supplement. Pill burden was a concern, with subjects taking six tablets per day.

An SR of 15 studies using probiotics showed no statistically significant difference in weight loss outcomes versus placebo.[\[175\]](#) Limitations included the heterogeneity of supplements studied.

A small RCT using raspberry ketones did not show a statistically significant outcome for weight loss for up to 12 weeks.[\[176\]](#) The study participants were all female.

Responses obtained from the patient focus group reflected some interest in dietary supplements, nutraceuticals, and over-the-counter (OTC) products for short-term weight loss, particularly in the active duty cohort who noted the negative effects of overweight and obesity on their military careers (see [Appendix B](#)). However, the Work Group found insufficient evidence of benefit to support an evidence-based, positive recommendation for the use of any nutraceutical for clinically meaningful short-term weight loss or long-term weight management. Since dietary supplements and nutraceuticals are not evaluated for safety and effectiveness before sale to consumers in the U.S., products sold to consumers may vary in purity, consistency, ingredient content, and dosing.[\[177\]](#)

Moreover, dietary supplements and nutraceuticals have generally not been studied in conjunction with CLIs, so there is insufficient evidence on whether the active dietary supplement or nutraceutical product outperforms placebo in conjunction with CLI, which the Work Group considered being a core component of any long-term weight management intervention. Moreover, the perceived benefits of dietary supplements and nutraceuticals, fueled by marketing and anecdotal reports, may create unrealistic expectations that limit patient and clinician interest and investment in the specific evidence-based interventions recommended in this CPG.

Summary

As this is a *Reviewed, New-added* recommendation, the Work Group systematically reviewed evidence related to this recommendation.[\[169-176\]](#) The Work Group's confidence in the quality of evidence was low. The body of evidence had many limitations and confounders of the evidence, including small sample sizes,[\[171\]](#) heterogeneity of supplement dosing and concentration,[\[170\]](#) use of highly selective study population,[\[174\]](#) and risk for bias.[\[174\]](#) Additional considerations were cost to the patient, pill burden, and the potential to divert patient interest and investment away from evidence-based interventions. There is