Table 1: Green tea for cancer prevention

Source: Karen Pilkington, CAM-Cancer Consortium. Green tea for cancer prevention [online document]. http://cam-cancer.org/en/green-tea, date 2020.

General review characteristics: Filippini T, Malavolti M, Borrelli F, Izzo AA, Fairweather-Tait SJ,Horneber M, Vinceti M. <u>Green tea (Camellia sinensis) for the prevention of cancer</u>. Cochrane Database of Systematic Reviews 2020, Issue 3. Art.No.: CD005004. DOI: 10.1002/14651858.CD005004.pub3

Type of review: Cochrane review

Search strategy: dates, databases, restrictions:

Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE (Ovid) Embase (Ovid), to January 2019; Amed, CancerLit, PsycInfo and Phytobase. to January 2009; also reference lists and reviews for non-English language papers; Clinical trials registry

Quality assessment: Cochrane risk of bias and Newcastle-Ottawa Scale

Measure of treatment effect:

Risk ratio (RR) for dichotomous outcomes (i.e. cancer risk), for experimental and nonexperimental studies; Mean difference for continuous outcomes (evaluation of quality of life scores)

Data synthesis: meta-analysis

Studies: n and design (e.g. RCT)

142 epidemiological studies of 11 experimental and 131 nonexperimental design

Participants: n and diagnosis

1795 participants in experimental studies; over 957,000 participants in cohort studies and 47,973 cases and 130,306 referents in case-control studies

Cancers of the digestive tract and the female reproductive system, breast, prostate, kidney and urinary tract, nasopharynx, lung, blood, skin, thyroid and brain.

Intervention:

Consumption of green tea or green tea extract (only monotherapy preparations for oral consumption in liquid, powder or tablet form). (green tea is defined as nonfermented tea leaves, and studies had to mention that green tea, non-fermented tea or 'matsu-cha' had been consumed)

Control:

placebo for intervention studies; different levels of consumption for nonexperimental studies

Outcome measures:

Cancer risk: number of participants developing cancer (incidence); number of participants dying from cancer (mortality).

Quality of life

Results for outcome measures:

Cancer risk: Findings were found to be inconsistent with limited evidence of a benefit for overall cancer risk or for risk of specific cancers.

Quality of life: Three studies found quality of life was slightly improved in the intervention group compared to the placebo group and one found no difference.

Adverse effects: Several side effects were associated supplemental intakes of green tea: most commonly gastrointestinal disorders (mild-to-moderate nausea, diarrhoea, constipation and reflux), raised liver enzymes, insomnia and dizziness, frequency of hypertension, rash and allergic skin reactions.

Results quality assessment:

The 11 RCTs were judged to be high quality were generally of high quality (low- or very low-certainty evidence from both experimental and nonexperimental studies)

Conclusions:

'A beneficial effect of green tea consumption on cancer prevention remains unproven so far. Caution is advised regarding supplementation with high-dose green tea extracts due to the possible adverse effects'.

Any other comments: Interpretation of the risk ratios and corresponding confidence intervals.