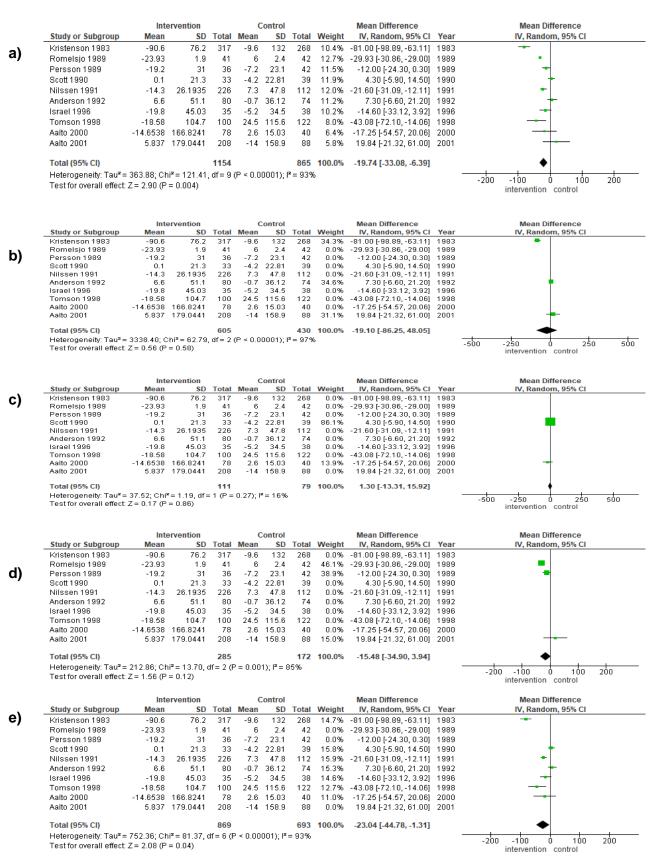
Info S1: Detail search Strategy:

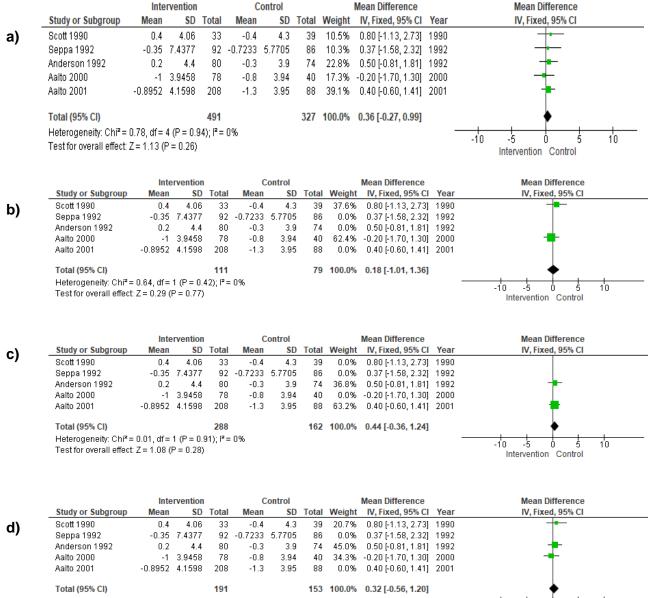
The search strategy was based on a population, intervention, comparator and outcome (PICO) model and a local expert librarian were consulted to support search strategy development. The final search strategy comprised of; "alcoholism", or "alcoholic*", or "alcoholic liver disease", or "binge drinking", or "alcohol intoxication", or "alcohol related disorders", or "alcohol misuse", or "alcohol dependence", or "alcohol abuse", or "harmful drinking", and "fibroscan", or "fibro scan", "fibrotest", or "liver fibrosis scan", or "transient elastography", or "Elastography", or "enhanced liver function test", or "ELF markers", or "liver function tests", or "liver function\$", or "Liver enzymes", or "liver biomarkers", or "liver tests", and "counselling", or "Advice", or "brief advice", or "simple advice", or "alcohol identification and brief advice", or "patient education", or "Brief alcohol intervention*", "alcohol intervention*", or "motivational intervention", "advice.ab", or "2brief adj2 advice", or "brief adj2 intervention", or "brief adj2 intervention*", and "alcohol Abstinence", or "reduction in alcohol use", or "selfreported alcohol intake", or "change in Behaviour", or "Behavio?r", or "Alcohol drinking behaviour", or "Change in drinking". We also searched Scopus for conferences proceedings, Ethos for grey literature and Clinicaltrials.gov for relevant clinical trials. Additionally, for included studies, a citation search was undertaken using Google Scholar and reference lists examined. The search was restricted to the English language.

Info S2: Components of Data Extraction:

The data was extracted on a predesigned data extraction form created by adopting the Cochrane collaboration data extraction form. The following details were extracted; author name and year of publication, study design, country and setting, sampling technique, method of recruitment, eligibility criteria, study duration, ethical approval, participants' demographics, sample size, baseline alcohol intake and laboratory parameters and if available alcohol use scores, type of advice given to intervention and control group, outcome measures, the key conclusion by author, and the study's strengths and limitations. Pre and post changes in self-reported alcohol intake and laboratory parameters were also collected. Where available, data on other outcomes (e.g. mortality and sickness days) were also extracted. Where information was missing the corresponding author of the study was contacted. Data on alcohol use was converted to gram/week of pure alcohol and for gamma-glutamyl transferase (GGT) to IU/Litre.



SF1: Change in GGT (IU/Litre) **a)** Intervention based advice versus Brief and Brief advice at request and no Advice **b)** Male only **c)** Female only **d)** alcohol intake <250 gram/week **e)** alcohol intake >250 gram/week

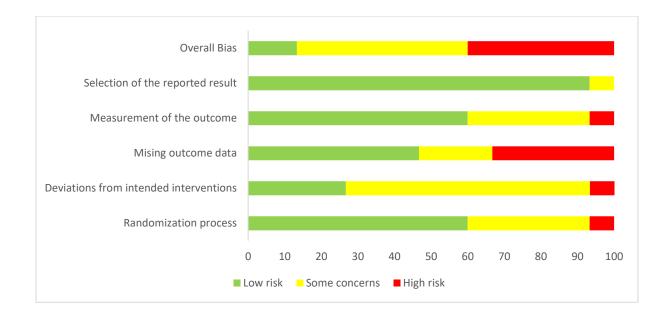


Heterogeneity: $Chi^2 = 0.77$, df = 2 (P = 0.68); $l^2 = 0\%$ Test for overall effect: Z = 0.72 (P = 0.47)

SF2: Change in MCV (femtoliters/cell) Fixed effect meta-analysis
a) Intervention based advice versus Brief and Brief advice at request and no Advice b)
Female only c) Male only d) alcohol intake >250 gram/week

-10 -5 0 5 10

Intervention Control



| Study ID | Experimental | Comparator | Outcome | Weight | Randomization process | Deviations from intended interventions | Missing outcome data | Measurement of the outcome | Selection of the reported result | Overall | | |
|-------------------|--------------|------------|-------------------|--------|-----------------------|--|----------------------|----------------------------|----------------------------------|----------|----------|--------------|
| Kahler 2018 | 1.1 | Control | Alcohol Use | 1 | _ | ? | + | + | ÷ | | | |
| Nilssen 2004 | Intervention | Control | Alcohol Use & GGT | 1 | ? | ? | - | — | - | ŏ | • | Low risk |
| Kristenson 1981/3 | Intervention | Control | Change In GGT | 1 | | ? | ? | Ū. | Ū. | <u> </u> | ? | Some concerr |
| Aalto 2001 | Intervention | Control | Alcohol Use & GGT | 1 | ? | - | <u> </u> | Ū. | Ū. | Ŏ | ĕ | High risk |
| Gentilello 1999 | Intervention | Control | Alcohol Use | 1 | _ | • | ĕ | • | — | ĕ | - | |
| Romelsjo 1989 | Intervention | Control | Alcohol Use & GGT | 1 | | ĕ | ? | ? | Ū. | ĕ | | |
| Poika 1988 | Intervention | Control | Alcohol Use & GGT | 1 | ? | ? | ē | ? | • | ĕ | | |
| Israel 1996 | Intervention | Advice | Alcohol Use & GGT | 1 | | ? | — | • | • | Ō | | |
| Persson 1989 | Intervention | Control | Alcohol Use & GGT | 1 | ē. | • | ? | ? | • | () () | | |
| Tomson 1998 | Intervention | Control | Alcohol Use & GGT | 1 | ē | • | • | ? | • | ĕ | | |
| Scott 1990 | Intervention | Control | Alcohol Use & GGT | 1 | _ | ? | — | • | • | Ŧ | | |
| Anderson 1992 | Intervention | Control | Alcohol Use & GGT | 1 | • | ? | • | • | • | Ť | | |
| Aalto 2000 | Intervention | Control | Alcohol Use & GGT | 1 | • | ? | + | + | + | <u>.</u> | | |
| Nilsson 1991 | Intervention | Control | Alcohol Use & GGT | 1 | • | ? | • | ? | ? | ĕ | | |
| Seppa 1992 | Intervention | Control | Alcohol Use | | | ? | ē | ē | • | é | | |

SF3: Risk of Bias and Quality assessment for Randomised control studies (Rob 2)