



# Alkohol vid hjärtsjukdom

Vad skall vi rekommendera?

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## Fakta om alkohol

- Sverige: 20% av alla män och 13% av kvinnorna har ett riskbruk av alkohol
- 20% av hypertoni hos män kan relateras till alkohol
- Av alla suicid kan 50% hänföras till alkohol
- Risken för förmaksflimmer och hjärtsvikt ökar vid alkoholförtäring
- Ca 1 000 barn föds årligen med fetalt alkohol-syndrom
- Ett 4v uppehåll av alkoholintag inför kirurgi minskar risken för komplikationer

# WHO's syn på alkohol

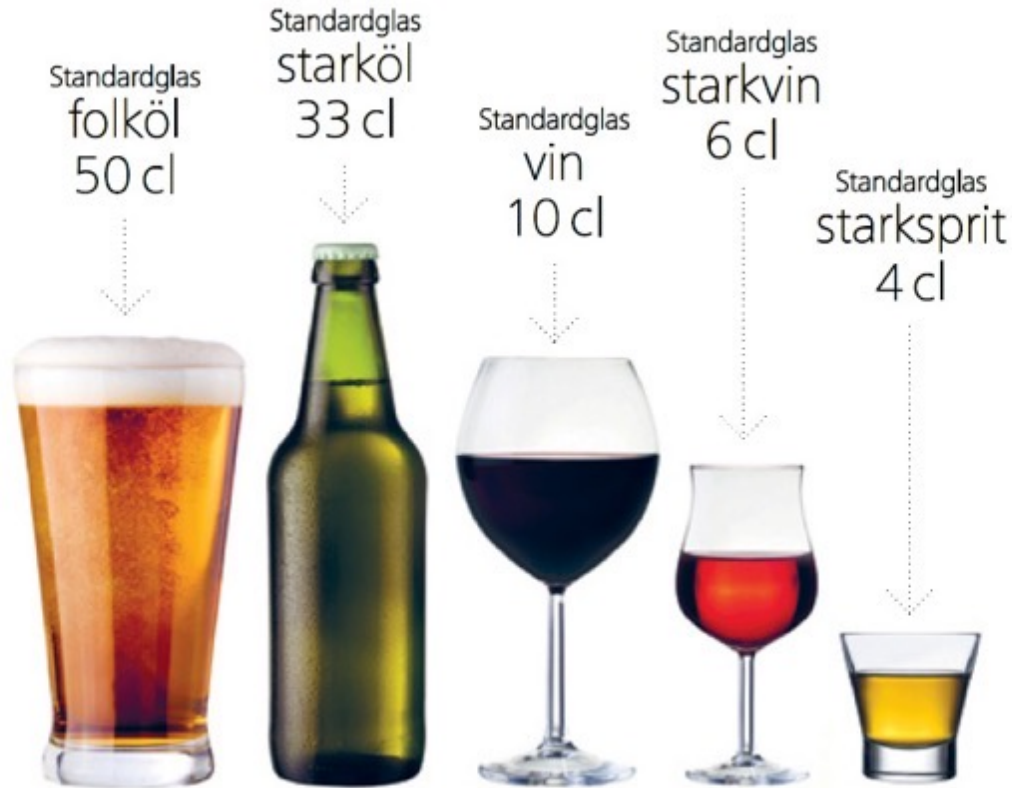


**O**ver the past several decades, the prevalence of cardiovascular diseases (CVD) has nearly doubled, and alcohol has played a major role in the incidence of much of it. Alcohol has also been attributed in deaths due to infectious diseases, intentional and unintentional injuries, digestive diseases, and several other non-communicable diseases, including cancer.

The economic costs of alcohol-associated health outcomes are significant at the individual as well as the country level. Risks due to alcohol consumption increase for all the major cardiovascular diseases,

including hypertensive heart disease, cardiomyopathy, atrial fibrillation and flutter, and stroke. The widespread message for **over 30 years** from some researchers, the alcohol industry, and the media has been to promote the myth that alcohol prolongs life, chiefly by reducing the risk of CVD. Lack of universal advice and stringent policy measures have contributed towards increased uptake and easy availability of alcohol. The WHO has called for a **10% relative reduction** in the per capita use of alcohol between 2013-2030. However, lack of investment in proven alcohol control strategies, as well as persistence of misinformation and industry interference, have hindered the efforts of public health professionals' to make sufficient progress in reducing alcohol related harms and death.

# Hur mycket är ett standardglas alkohol?



**Standardglas** är ett mått som ofta används för att mäta alkoholkonsumtion. Ett standardglas innehåller 12 gram ren alkohol.

## Riskbruk av alkohol enligt 1177

- Fler än 9 standardglas per vecka om du är kvinna
- Fler än 14 standardglas per vecka om du är man
- Fler än 4 standardglas vid ett och samma tillfälle om du är man
- Fler än 3 standardglas vid ett och samma tillfälle om du är kvinna

# Hur kartlägger vi alkoholvanor?

- Kartläggning av alkoholvanor bör ingå i det sekundärpreventiva arbetet. AUDIT frågeformulär på Socialstyrelsens webbplats, Socialstyrelsens indikatorfrågor och/eller mätning av B-PEth 5 kan användas som hjälpmedel för skattning av alkoholkonsumtion.
- Kranskärlssjuka patienter som konsumerar alkohol bör rekommenderas endast lågt intag (se detaljer i bilaga 3). Upplys också om alkoholens skadliga effekter (till exempel ökad risk för förmaksflimmer och hjärtsvikt) samt energiinnehållet i alkohol.
- Rådgivande samtal bör ges till patienter som har ett riskbruk/skadligt bruk av alkohol. I vissa fall kan remiss till enhet där specialistkompetens för kvalificerat rådgivande samtal i alkoholfrågor finns vara indicerad. Se kunskapsguiden.se.
- Hänvisning till Alkohollinjen (tel. 020-84 44 48) och/eller webbaserade interventioner (till exempel <https://alkoholhjalpen.se/>) kan vara lämplig för patienter med riskbruk/skadligt bruk av alkohol.

# Uppföljning på mottagningen efter en hjärtinfarkt Vilka råd skall vi ge?

*Kan jag ta ett glas vin till helgen?*

*Hur många glas i veckan kan man ta?*

*Bör jag sluta helt?*

*Hur farligt är det?*



# 2021 ESC Guidelines on cardiovascular disease prevention in clinical practice

Developed by the Task Force for cardiovascular disease prevention in clinical practice with representatives of the European Society of Cardiology and 12 medical societies

With the special contribution of the European Association of Preventive Cardiology (EAPC)

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# ESC guidelines Prevention

- Consumption of alcoholic beverages should be limited to 2 glasses per day (20 g/d of alcohol) for men and 1 glass per day (10 g/d of alcohol) for women.

*ESC Prevention guidelines 2016*

Recommendations	Class <sup>a</sup>	Level <sup>b</sup>
A healthy diet is recommended as a cornerstone of CVD prevention in all individuals. <sup>401,402</sup>	I	A
It is recommended to adopt a Mediterranean or similar diet to lower risk of CVD. <sup>403,404</sup>	I	A
It is recommended to replace saturated with unsaturated fats to lower the risk of CVD. <sup>405–409</sup>	I	A
It is recommended to reduce salt intake to lower BP and risk of CVD. <sup>410</sup>	I	A
It is recommended to choose a more plant-based food pattern, rich in fibre, that includes whole grains, fruits, vegetables, pulses, and nuts. <sup>411,412</sup>	I	B
It is recommended to restrict alcohol consumption to a maximum of 100 g per week. <sup>413–415</sup>	I	B
It is recommended to eat fish, preferably fatty, at least once a week and restrict (processed) meat. <sup>406,416–418</sup>	I	B
It is recommended to restrict free sugar consumption, in particular sugar-sweetened beverages, to a maximum of 10% of energy intake. <sup>419,420</sup>	I	B

*ESC Prevention guidelines 2021*

# Vad är hälsosam kost?

**Table 8** Healthy diet characteristics

Adopt a more plant- and less animal-based food pattern

Saturated fatty acids should account for <10% of total energy intake, through replacement by PUFAs, MUFAs, and carbohydrates from whole grains

Trans unsaturated fatty acids should be minimized as far as possible, with none from processed foods

<5 g total salt intake per day

30–45 g of fibre of per day, preferably from wholegrains

≥200 g of fruit per day (≥2–3 servings)

≥200 g of vegetables per day (≥2–3 servings)

Red meat should be reduced to a maximum of 350 -500 g a week, in particular processed meat should be minimized

Fish is recommended 1–2 times per week, in particular fatty fish

30 g unsalted nuts per day

Consumption of alcohol should be limited to a maximum of 100 g per week

Sugar-sweetened beverages, such as soft drinks and fruit juices, must be discouraged



## VETENSKAP

## Studie: Ett glas vin om dagen verkar skydda hjärtsjuka

UPPDATERAD 07:59 PUBLICERAD 02:00



Foto: Fredrik Sandberg/TT

Ett intag av alkohol motsvarande upp till ett glas vin om dagen kan minska risken för nya hjärthändelser och död hos patienter med hjärt-kärlsjukdom. Det visar den mest omfattande studien hittills.

I studien av alkoholens effekt på hjärtsjuka personer kan brittiska forskare visa att ett måttligt intag verkar skydda mot framtida hjärt-kärlhändelser som hjärtinfarkt, kärlkramp eller stroke samt minskar risken att avlida i förtid, både av hjärtrelaterade orsaker och generellt.

Den konsumtion av alkohol som rekommenderas är...

Dagens Nyheter  
27 juli 2021

# SVT Morgonstudio

svt1

CLAES HELD professor kardiologi Uppsala universitet

**HÄLSA** Måttligt alkoholintag tycks förhindra kommande hjärt-kärlhändelser

## Stor studie: Lite vin kan skydda hjärtsjuka

svt.se Fler får böter för hög och störande musik

07.23

Morgon  
studio

## Alkohol och hjärt-kärlsjukdomar.

### Skyddar ett glas vin om dagen våra hjärtsjuka?

Text: Claes Held för arbetsgruppen för preventiv kardiologi och levnadsvanor

Myt eller  
verklighet??

Vilka råd skall vi ge  
till våra patienter?

Människan har levt med alkohol vid sin sida genom hela historien. Vin har producerats i minst 8000 år och bilden av en kejsare som dricker vin till fest i det gamla Rom är tydlig. Våra skandinaviska vikingar förknippas nog mer som stora konsumenter av mjöd men även denna dryck har funnits betydligt längre än så och även i andra kulturer. Sedan har det fortsatt och det är nog ingen överdrift att påstå att alkohol idag är en av världens mest använda måltidsdrycker, och som för de flesta förknippas med social samvaro, glädje, avkoppling, fest och firande.

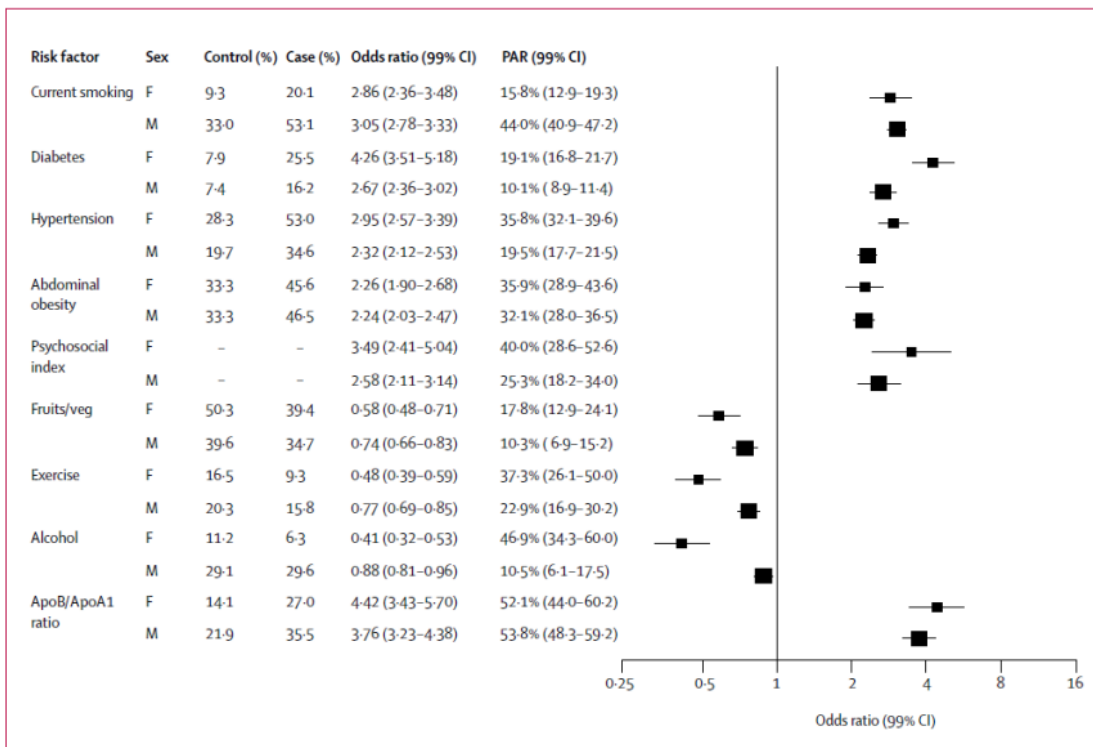
Trots detta så har det alltid funnits en baksida. Alla känner till alkoholens negativa effekter och konsekvenser av överkonsumtion som missbruksproblem, sociala problem, tumörsjukdomar, leversjukdom, stroke, olyckor och skador. Å andra sidan finns det ett flertal populationsstudier som visar att de som har ett lågt begränsat intag av alkohol förefaller ha en lägre risk att utveckla hjärt-kärlsjukdomar än de som inte konsumerar något alls. Studier har påvisat en U-formad association mellan lågt alkoholinlag och en lägre risk att drabbas av hjärt-kärlsjukdomar jämfört med de som inte nytt-



”Det är alltid kontroversiellt att diskutera effekter av alkohol och huruvida det kan finnas skyddande effekter och balansera detta mot alla kända negativa skadeverkningar.”

# INTERHEART-studien

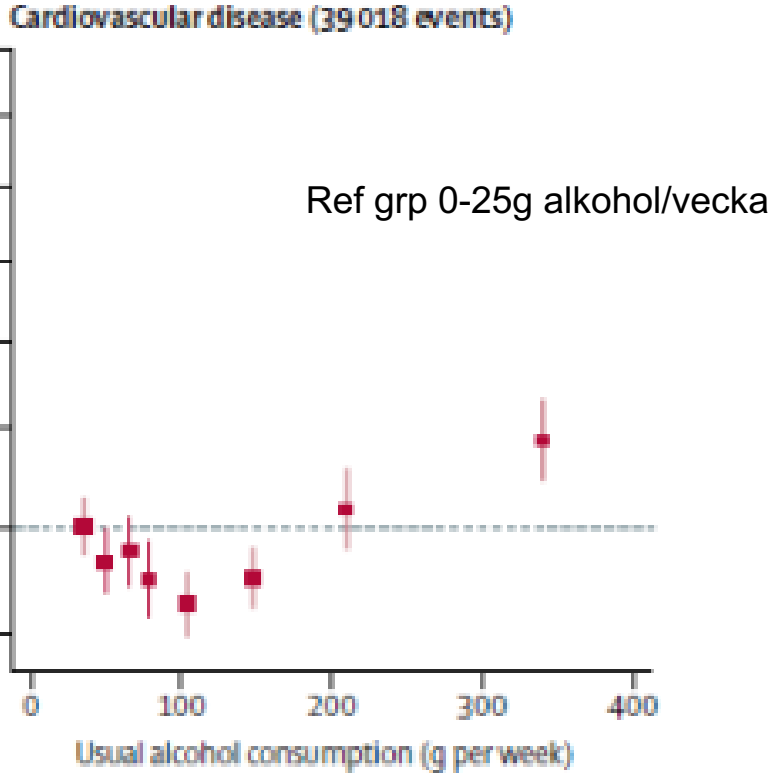
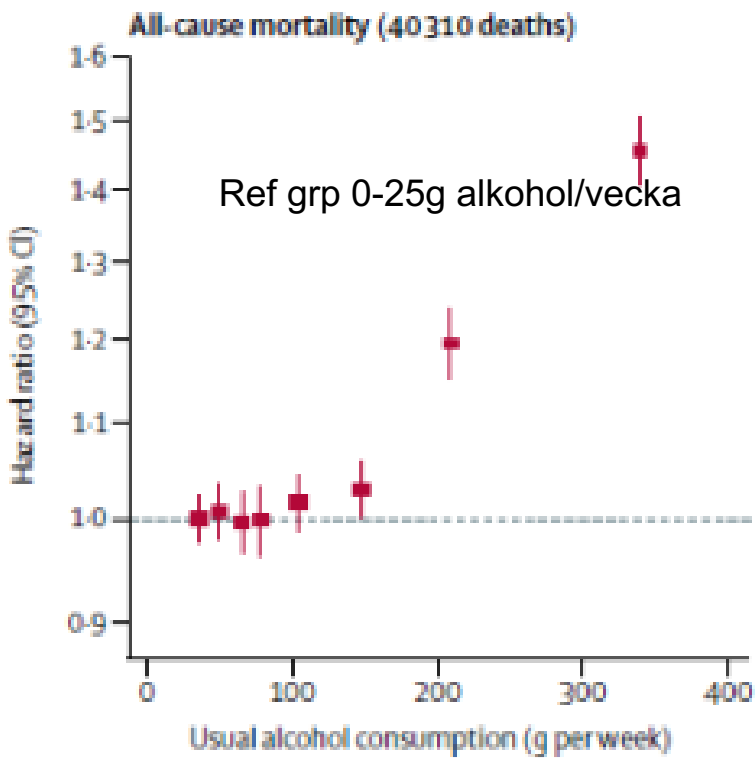
## Nio faktorer förklarar 90 % av risken för hjärtinfarkt

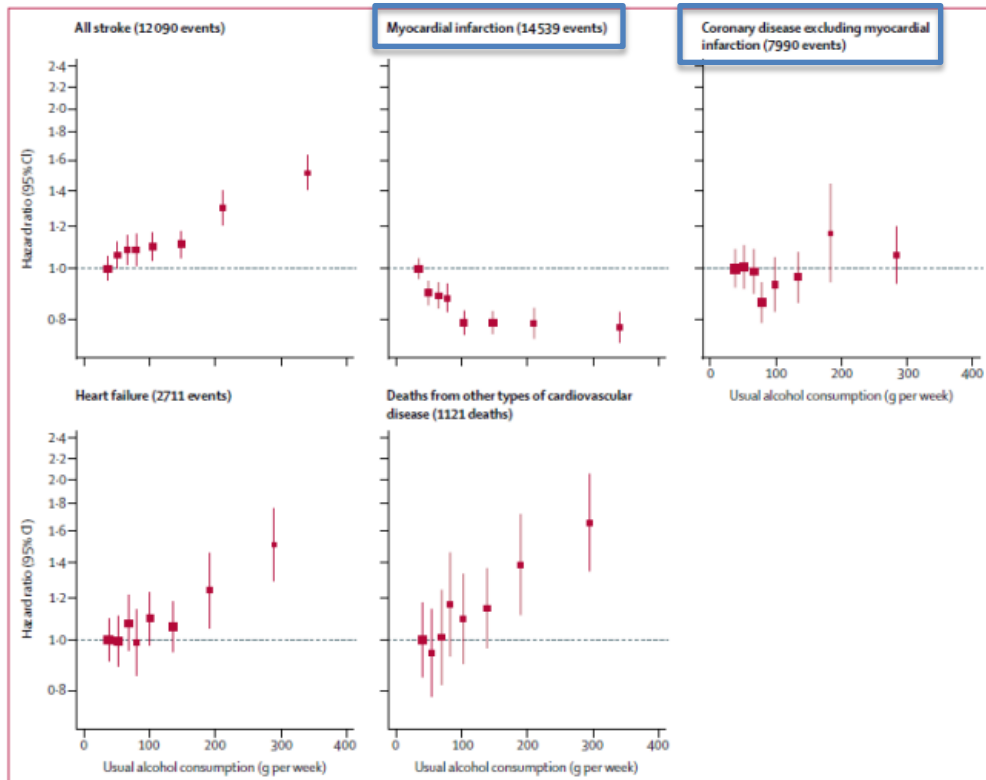


Alkohol minst 3 ggr/vecka

**Figure 4: Association of risk factors with acute myocardial infarction in men and women after adjustment for age, sex, and geographic region**  
 For this and subsequent figures, the odds ratios are plotted on a doubling scale. Prevalence cannot be calculated for psychosocial factors because it is derived from a model.

# The Emerging Risk Factors Collaboration, EPIC-CVD, and the UK Biobank (n=599 912). Ingen känd KV sjukdom.



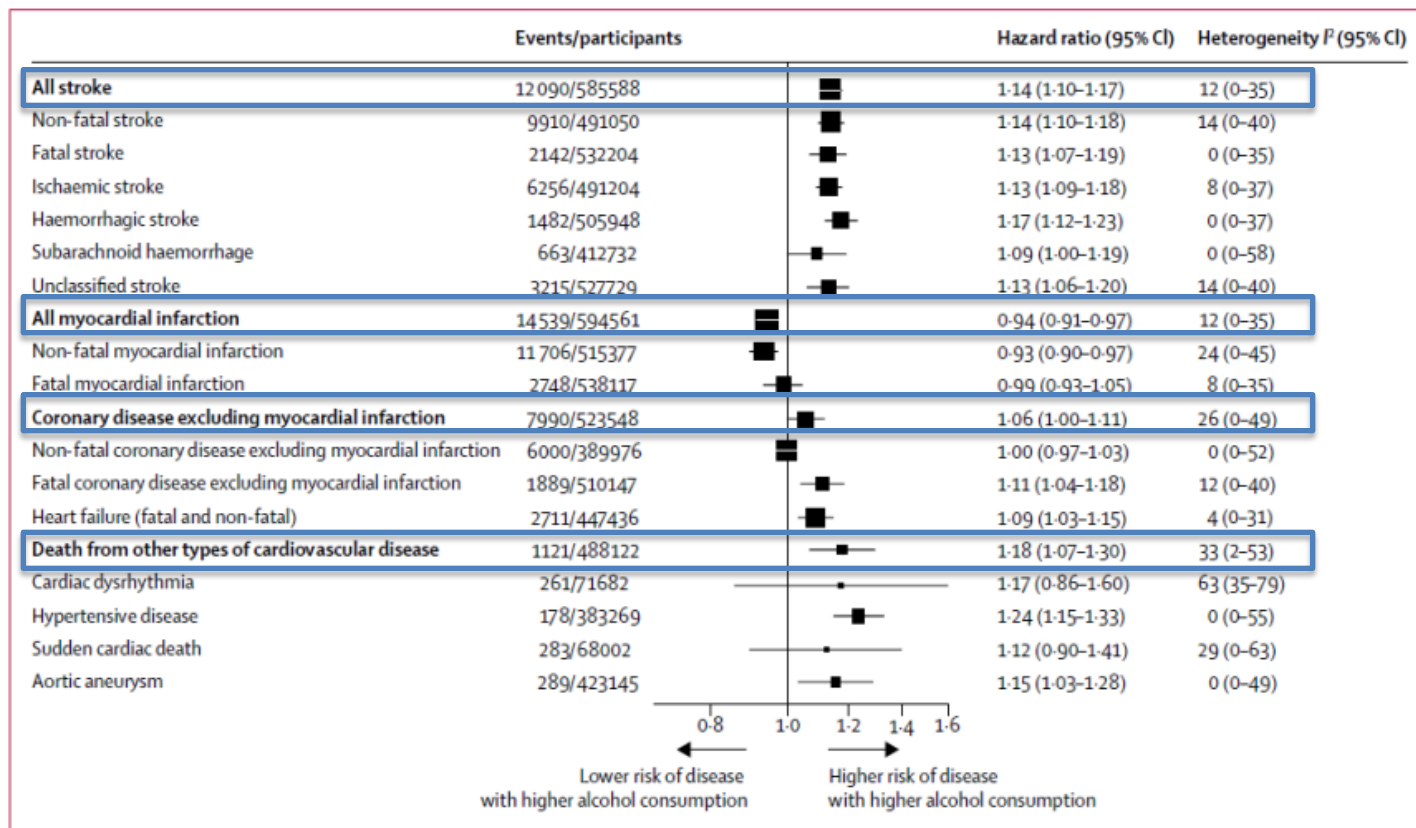


**Figure 2: Associations of usual alcohol consumption with cardiovascular subtypes in alcohol drinkers**  
 Hazard ratios are adjusted for age, smoking, and history of diabetes, and stratified by sex and EPIC centre. The reference category is the lowest baseline alcohol consumption category (between 0 and 25g/week). Hazard ratios are plotted against the mean usual alcohol consumption in each category. Studies with fewer than five events of any outcome were excluded from the analysis of that outcome. Sizes of the boxes are proportional to the inverse of the variance of the log-transformed hazard ratios. Vertical lines represent 95% CIs. Deaths from other cardiovascular disease include the following outcomes: cardiac dysrhythmia, hypertensive disease, sudden death, and aortic aneurysm.

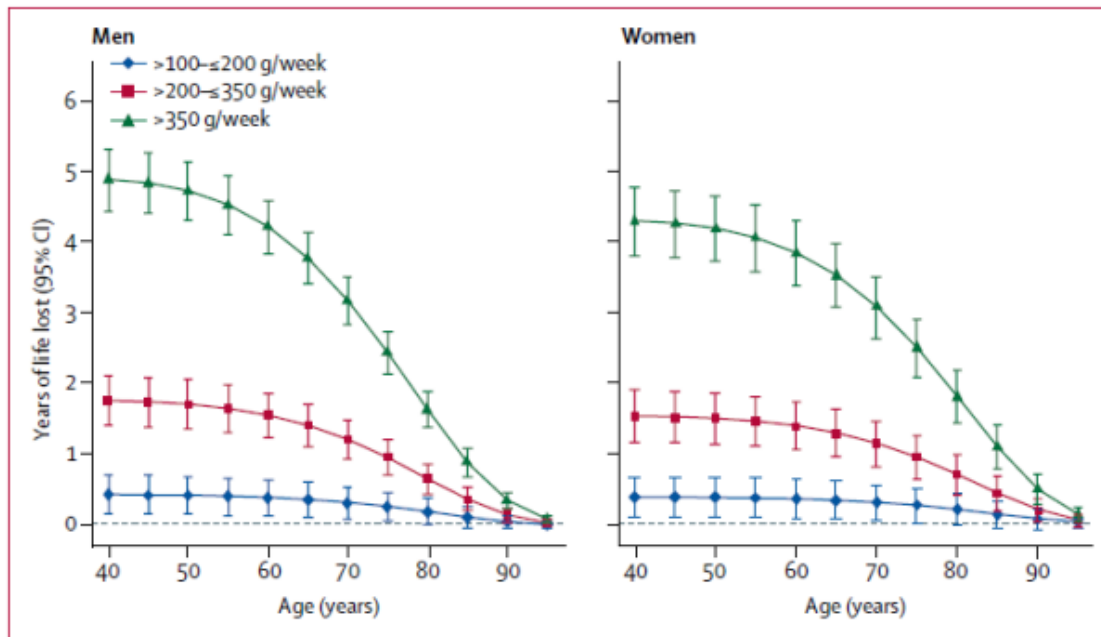
Ref grp 0-25g alcohol/vecka

In conclusion, our study shows that among current drinkers, the threshold for lowest risk of all-cause mortality was about 100 g per week. For cardiovascular disease subtypes other than myocardial infarction, there were no clear thresholds below which lower alcohol consumption stopped being associated with a lower disease risk. These data support adoption of lower limits of alcohol consumption than are recommended in most current guidelines.





**Figure 3: Hazard ratios for subtypes of cardiovascular outcomes in current drinkers, per 100 g per week higher usual alcohol consumption**  
 Hazard ratios are adjusted for age, smoking, and history of diabetes, and stratified by sex and centre. Studies with fewer than five events of any outcome were excluded from the analysis of that outcome.



**Figure 4: Estimated future years of life lost by extent of reported baseline alcohol consumption compared with those who reported consuming >0–≤100 g per week**

The estimates of cumulative survival from 40 years of age onwards in the alcohol-drinking groups were calculated by applying hazard ratios (specific to age at risk) for all-cause mortality associated with categorised baseline alcohol consumption to US death rates at the age of 40 years or older. Mean usual levels of alcohol consumption within each baseline alcohol consumption category were 56, 123, 208 and 367 g per week, respectively, for the groups >0–≤100 g per week, >100–≤200 g per week, >200–≤350 g per week, and >350 g per week.

# Alkoholkonsumtion och risk hos patienter med kardiovaskulär sjukdom

Ding et al. *BMC Medicine* (2021) 19:167  
<https://doi.org/10.1186/s12916-021-02040-2>

BMC Medicine

RESEARCH ARTICLE

Open Access

## Association of alcohol consumption with morbidity and mortality in patients with cardiovascular disease: original data and meta-analysis of 48,423 men and women



Chengyi Ding<sup>1\*</sup>, Dara O'Neill<sup>2</sup>, Steven Bell<sup>3,4,5</sup>, Emmanuel Stamatakis<sup>6</sup> and Annie Britton<sup>1</sup>

### Abstract

**Background:** Light-to-moderate alcohol consumption has been reported to be cardio-protective among apparently healthy individuals; however, it is unclear whether this association is also present in those with disease. To examine the association between alcohol consumption and prognosis in individuals with pre-existing cardiovascular disease (CVD), we conducted a series of meta-analyses of new findings from three large-scale cohorts and existing published studies.

**Methods:** We assessed alcohol consumption in relation to all-cause mortality, cardiovascular mortality, and subsequent cardiovascular events via de novo analyses of 14,386 patients with a previous myocardial infarction, angina, or stroke in the UK Biobank Study (median follow-up 8.7 years, interquartile range [IQR] 8.0–9.5), involving 1640 deaths and 2950 subsequent events, and 2802 patients and 1257 deaths in 15 waves of the Health Survey for England 1994–2008 and three waves of the Scottish Health Survey 1995, 1998, and 2003 (median follow-up 9.5 years, IQR 5.7–13.0). This was augmented with findings from 12 published studies identified through a systematic review, providing data on 31,235 patients, 5095 deaths, and 1414 subsequent events. To determine the best-fitting dose-response association between alcohol and each outcome in the combined sample of 48,423 patients, models were constructed using fractional polynomial regression, adjusting at least for age, sex, and smoking status.

**Results:** Alcohol consumption was associated with all assessed outcomes in a J-shaped manner relative to current non-drinkers, with a risk reduction that peaked at 7 g/day (relative risk 0.79, 95% confidence interval 0.73–0.85) for all-cause mortality, 8 g/day (0.73, 0.64–0.83) for cardiovascular mortality and 6 g/day (0.50, 0.26–0.96) for cardiovascular events, and remained significant up to 62, 50, and 15 g/day, respectively. No statistically significant elevated risks were found at higher levels of drinking. In the few studies that excluded former drinkers from the non-drinking reference group, reductions in risk among light-to-moderate drinkers were attenuated.

**Table 3** Best-fitting models and results of the meta-analysis on alcohol consumption and risk of mortality and subsequent cardiovascular events

Outcome and subgroup	No. of studies (curves)	No. of patients	Maximal effect size <sup>a</sup>		Reversion point, g/day <sup>b</sup>	Powers for the Best-Fitting FP2	
			RR (95% CI)	g/day		dose_1	dose_2
<b>All-cause mortality</b>							
Overall	11 (11)	41,743	0.79 (0.73–0.85)	7	62	–0.5	1
Male	6 (6)	19,897	0.82 (0.72–0.93)	9	39	0	0.5
Female	3 (3)	6046	0.64 (0.36–1.14)	54	49	–2	3
MI as primary event	9 (9)	29,554	0.82 (0.68–0.99)	2	7	–1	0.5
Angina as primary event	2 (2)	8938	0.79 (0.63–0.99)	39	46	0.5	3
Stroke as primary event	3 (3)	3618	0.71 (0.42–1.20)	12	NA	0	0.5
Reference group including former drinkers	9 (9)	41,405	0.77 (0.69–0.85)	16	75	–0.5	2
Reference group excluding former drinkers	4 (4)	17,526	0.85 (0.71–1.00)	3	3	–0.5	–0.5
Post-event alcohol assessment	8 (8)	37,245	0.81 (0.74–0.88)	9	52	0	0.5
Multiple alcohol measures	2 (2)	12,337	0.78 (0.59–1.03)	16	NA	–0.5	–0.5
<b>Cardiovascular mortality</b>							
Overall	9 (9)	24,770	0.73 (0.64–0.83)	8	50	0	0.5
Male	5 (5)	14,536	0.72 (0.62–0.85)	9	32	0	0.5
Female	2 (2)	4790	0.29 (0.09–1.01)	54	54	0	2
MI as primary event	6 (6)	12,472	0.76 (0.64–0.91)	3	25	–2	3
Angina as primary event	2 (2)	8934	0.72 (0.42–1.23)	56	NA	3	3
Stroke as primary event	3 (3)	3617	0.63 (0.37–1.08)	26	NA	0	3
Reference group including former drinkers	6 (6)	24,269	0.73 (0.58–0.93)	13	27	0	0.5
Reference group excluding former drinkers	5 (5)	17,683	0.71 (0.55–0.90)	7	29	–0.5	0.5
Post-event alcohol assessment	7 (7)	21,525	0.73 (0.60–0.90)	8	43	0	0
Multiple alcohol measures	1 (1)	1818	0.58 (0.40–0.84)	17	33	–0.5	3
<b>Cardiovascular events</b>							
Overall <sup>c</sup>	4 (5)	28,621	0.50 (0.26–0.96)	6	15	–2	–2
Male	3 (4)	13,598	0.56 (0.23–1.34)	8	NA	–2	–2
Female	1 (1)	3775	0.67 (0.43–1.05)	54	49	–2	3
MI as primary event	4 (5)	20,361	0.79 (0.66–0.94)	11	35	–2	3
Angina as primary event	1 (1)	8747	0.69 (0.59–0.81)	35	na.	–2	1
Stroke as primary event	1 (1)	1855	0.49 (0.26–0.92)	72	na.	–2	3
Reference group including former drinkers	3 (3)	25,983	0.72 (0.53–0.97)	40	45	1	1
Reference group excluding former drinkers	2 (3)	17,020	0.78 (0.46–1.31)	17	NA	3	3
Multiple alcohol measures	1 (1)	353	0.32 (0.14–0.71)	38	na.	2	3

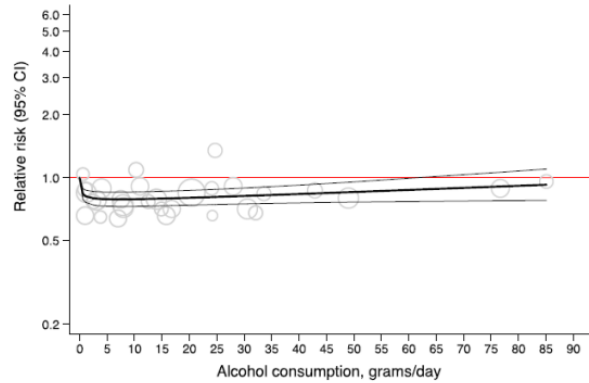
FP2 second-degree fractional polynomial model; MI myocardial infarction

<sup>a</sup>Defined as the lowest point of the dose-response curve within the range of dose reported by the studies

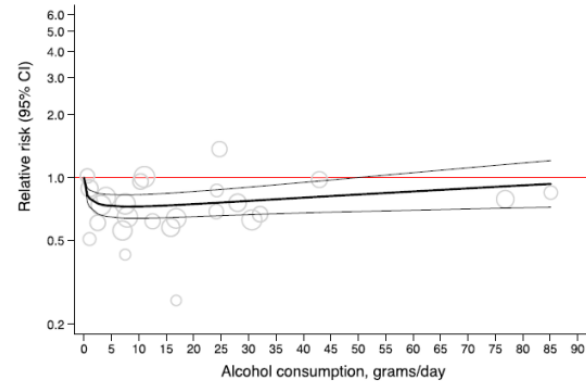
<sup>b</sup>Defined as the dose of alcohol at which protection against the outcome is no longer statistically significant at the 95% confidence level; not applicable (NA) if non-significant association was found at any level of consumption; not available (na.) if the association remained significant within the range of dose reported by the studies

<sup>c</sup>All of the four studies measured post-event alcohol consumption and had a quality score  $\geq 7$

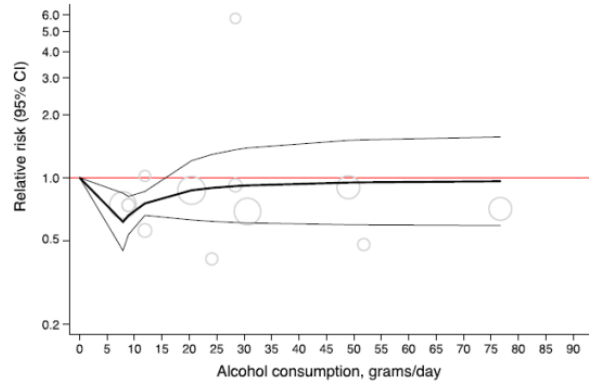
**A** All-cause mortality (11 studies)



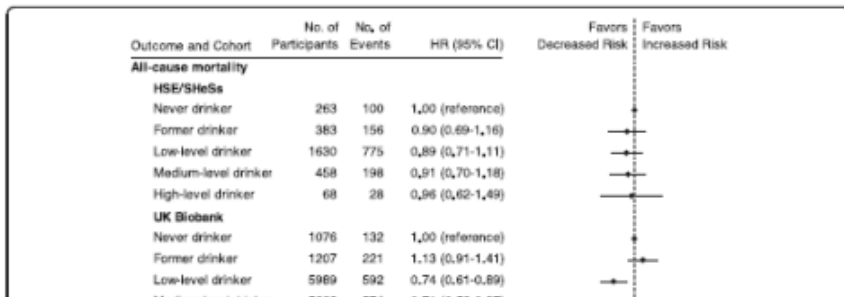
**B** Cardiovascular mortality (9 studies)



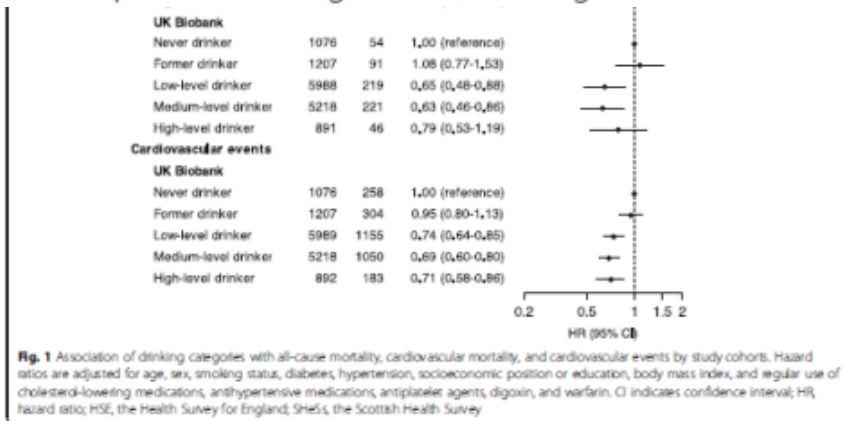
**C** Cardiovascular events (4 studies)



**Fig. 2** Overall dose-response relationship between alcohol consumption and risk of mortality and subsequent cardiovascular events, using maximally-adjusted estimates. Best-fitting second-degree fractional polynomial models (with 95% CIs) are shown in solid curves with each data point overlaid as circles. Circle size indicates the weighting of each data point and is inversely proportional to the variance of the log-transformed relative risk



**Conclusions:** For secondary prevention of CVD, current drinkers may not need to stop drinking. However, they should be informed that the lowest risk of mortality and having another cardiovascular event is likely to be associated with lower levels of drinking, that is up to approximately 105g (or equivalent to 13 UK units, with one unit equal to half a pint of beer/lager/cider, half a glass of wine, or one measure of spirits) a week.



[78]. Our findings therefore indicate that, for secondary prevention of CVD, current drinkers may not need to stop drinking but should be informed that lower levels of intake (up to 105g/week) may be associated with reduced risks. However, non-drinking patients should not be encouraged to take up light drinking because of well-known adverse effects on other health outcomes, such as cancers [79].

# Begränsningar

- Stor heterogenicitet mellan studierna
- Osäkerhet kring mängden alkoholintag (självrapporterat)
- Associationer, ej kausala samband
- Intagsmönster (binge-drinking, etc)
- Risk för selektions bias, ex vis non-drinkers kan vara fd alkoholister med dåligt hälsostatus
- Olika justeringsmodeller, ex vis missing data för läkemedel

## SAMMANFATTNING

- Epidemiologiska studier/metaanalyser indikerar en U/J-formad association mellan alkoholintag och risk både hos friska och hos de med känd kardiovaskulär sjukdom
- Tröskelvärde ca 100g alkohol per vecka
- Linjärt ökad risk för död och stroke med ökande intag
- Metodologiska begränsningar finns
- Prospektiva studier saknas
- Oklart om det finns en lägre gräns som är säker/skyddar



## SAMMANFATTNING vilka råd skall vi ge?

- För patienter med hjärtinfarkt med alkoholkonsumtion bör intaget begränsas till max 100g/ vecka (ca 8-10 standardglas)
- De som inte dricker alkohol skall inte få rådet att börja
- Patienter med annan hjärtsjukdom bör informeras om riskerna med alkohol och att det inte verkar finnas någon lägsta gräns

TACK för  
uppmärksamheten!

