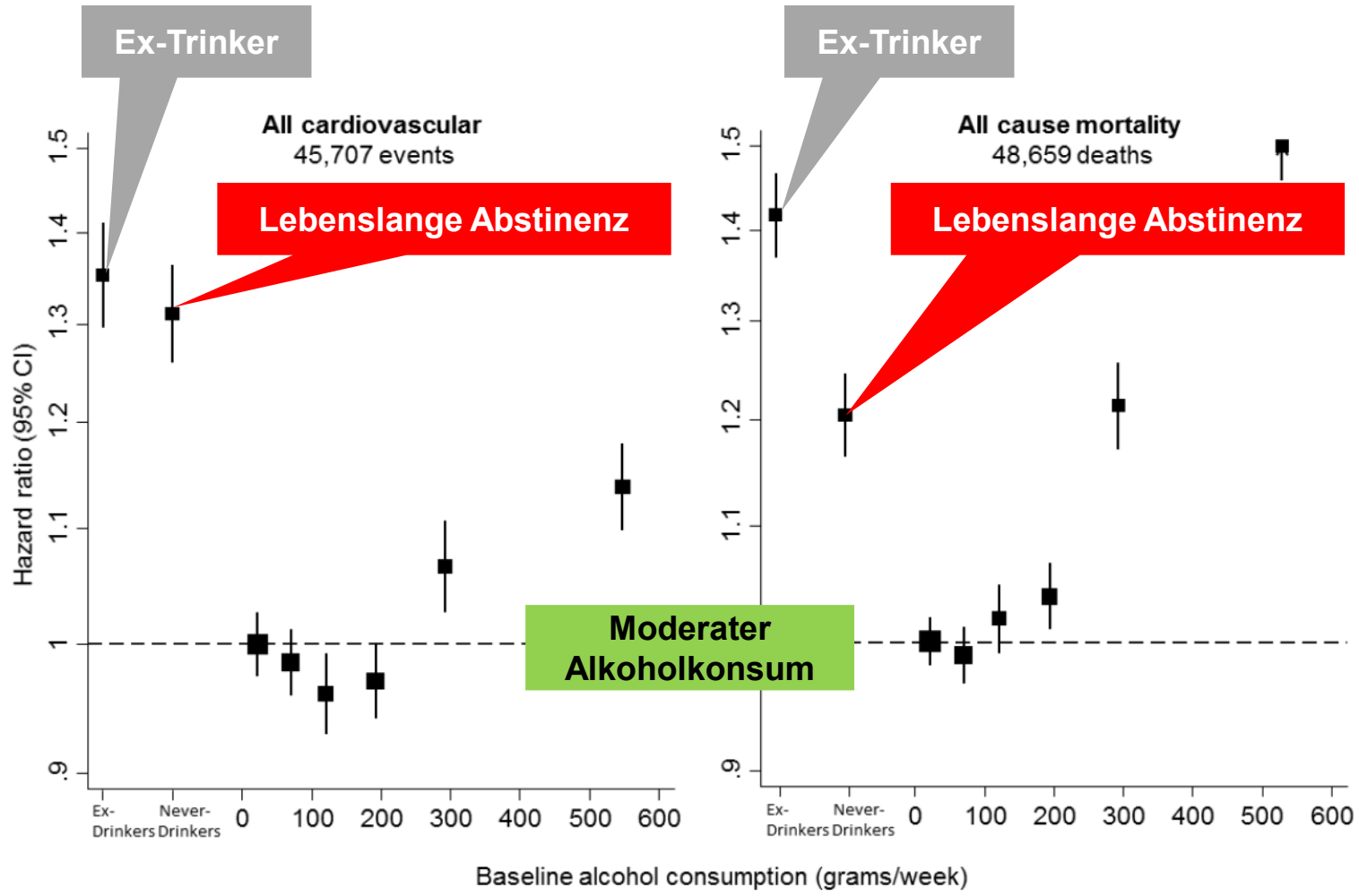
eFigure 10: Shape of association between baseline alcohol consumption, including ex- and non-drinkers, with all cardiovascular disease and all-cause mortality.



Adjusted for age, smoking and history of diabetes, and stratified by sex and EPIC centre. Alcohol consumption categories amongst current drinkers were >0-≤50 grams/week, >50-≤100 grams/week, >100-≤150 grams/week, >150-≤250 grams/week, >250-≤350 grams/week and >350 grams/week. The reference category is the lowest baseline alcohol consumption category (>0 and ≤50g/week). Studies with fewer than five events of any outcome were excluded from the analysis of that outcome. The sizes of the boxes are proportional to the inverse of the variance of the log-transformed hazard ratios. Vertical lines represent 95% CIs. Individuals for whom we were unable to distinguish as ex- or never- drinkers were excluded from the analysis.

Wood, A et al., Lancet 2018; 391: 1513–23

prevention first

Moderater Weingenuss

als Teil eines gesunden Lebensstils

Dr. med. Johannes Scholl

www.preventionfirst.de

Interessenkonflikte zum Thema Wein

Dr. med. Johannes Scholl

- Aufgewachsen in einem Weindorf
- Seit der Kindheit mit (heutigen) Winzern befreundet
- 1970 mit dem Opa Weinberg Im Kolsterberg gepflanzt
- 0,5 ha Weinberge in Familienbesitz (verpachtet)
- Mitglied der Weinloge „Die Kranenmeister zu Oestrich“
- Weinsammler, Weinverkostungen

Dr. med. Johannes Scholl

- Facharzt für Innere Medizin, Ernährungsmedizin, Sportmedizin, Notfallmedizin, **Präventivmedizin**
- Privatärztlich niedergelassen seit 2001 (Prevention First) mit Praxen in Rüdesheim, Frankfurt, München und Berlin
- 16 Ärzte machen >6000 Check-up-Untersuchungen für die Mitarbeitenden von >80 Unternehmen
- Gründungspräsident 2005 der Deutschen Akademie für Präventivmedizin e.V. (www.akaprev.de)
- Gastdozent an der Uni Mainz (Q10 Prävention)
- **Buchautor: „Diabetes – zurück auf Null“, TRIAS-Verlag** (Einnahmen aus Verkauf -> Werbung für das Buch)

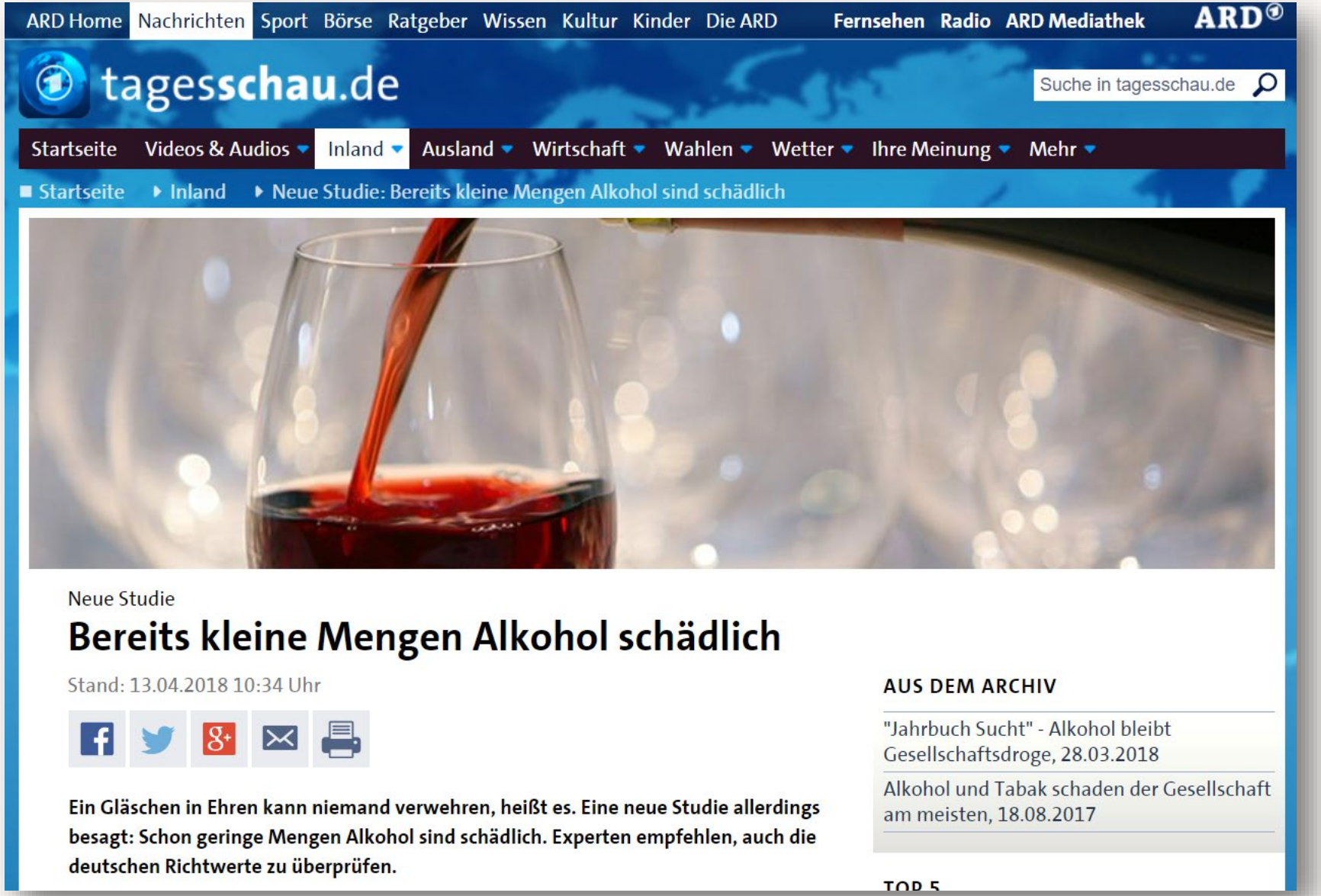
Ebenen der Diskussion

Gesundheitspolitik: Es kann nicht dieselben Empfehlungen „für alle“ geben. Aufruf zur „Mäßigung“ und Hinweis auf die Bedeutung der Einbettung in einen gesunden Lebensstil.

„Kein risikoloser Alkoholkonsum“: Orthorexie und Abstinenz vs. Lebensstil und Genuss. Religiöse Hintergründe (USA), moralische Empörung, Trittbrettfahrer (Hirschhausen, Kast…)

Differenzierung nach Getränken: klare Überlegenheit von Wein gegenüber Bier / Spirituosen wird ignoriert. Offene Frage: Macht das Getränk und/oder der Lebensstil / die Ernährungsweise der Konsumenten den Unterschied?

Gesundheitliche Effekte: Datenlage zu den positiven Wirkungen des moderaten Konsums ist eindeutig, aber Studienergebnisse werden manipuliert bzw. absichtlich falsch dargestellt.



SPIEGEL ONLINE SPIEGEL+ Anmelden

Nachrichten > Gesundheit > Ernährung & Fitness > Alkohol > Alkohol: Schon kleine Mengen verkürzen laut Studie das Leben

Studie

Schon kleine Mengen Alkohol verkürzen das Leben

Ein Glas Wein am Tag schadet nicht - heißt es. Doch laut einer aktuellen Studie sind schon geringe Mengen Alkohol schädlich und verkürzen die Lebenszeit. Auch die deutschen Richtwerte sollten demnach überprüft werden.

prevention first

Politik Finanzen Wissen Gesundheit Kultur Panorama Sport Digital Reisen

Nachrichten › Gesundheit › News › Bier und Wein: Schon mäßiger Alkoholkonsum verkürzt die Lebenserwartung

Nicht jeden Tag ein Glas Bier oder Wein

Schon mäßiger Alkoholkonsum verkürzt die Lebenserwartung

Teilen

0

Richtwert oft zu hoch: Schon geringe Menge Alkohol verkürzt die Lebenserwartung FOCUS Online/Wochit

Sonntag, 15.04.2018, 12:30

Metaanalyse 2018: „Es gibt keinen risikolosen Konsum!“

Wood, AM et al., Lancet 2018; 391: 1513–23; Published: April 14, 2018 DOI:https://doi.org/10.1016/S0140-6736(18)30134-X

Risk thresholds for alcohol consumption: combined analysis of individual-participant data for 599 912 current drinkers in 83 prospective studies

*Angela M Wood, Stephen Kaptoge, Adam S Butterworth, Peter Willeit, Samantha Warnakula, Thomas Bolton, Ellie Paige, Dirk S Paul, Michael Sweeting, Stephen Burgess, Steven Bell, William Astle, David Stevens, Albert Koulman, Randi M Selmer, W M Monique Verschuren, Shinichi Sato, Inger Njølstad, Mark Woodward, Veikko Salomaa, Børge G Nordestgaard, Bu B Yeap, Astrid Fletcher, Olle Melander, Lewis H Kuller, Beverley Balkau, Michael Marmot, Wolfgang Koenig, Edoardo Casiglia, Cyrus Cooper, Volker Arndt, Oscar H Franco, Patrik Wennberg, John Gallacher, Agustín Gómez de la Cámara, Henry Völzke, Christina C Dahm, Caroline E Dale, Manuela M Bergmann, Carlos J Crespo, Yvonne T van der Schouw, Rudolf Kaaks, Leon A Simons, Pagona Lagiou, Josje D Schoufour, Jolanda M A Boer, Timothy J Key, Beatriz Rodriguez, Conchi Moreno-Iribas, Karina W Davidson, James O Taylor, Carlotta Sacerdote, Robert B Wallace, J Ramon Quiros, Rosario Tumino, Dan G Blazer II, Allan Linneberg, Makoto Daimon, Salvatore Panico, Barbara Howard, Guri Skeie, Timo Strandberg, Elisabete Weiderpass, Paul J Nietert, Bruce M Psaty, Daan Kromhout, Elena Salamanca-Fernandez, Stefan Kiechl, Harlan M Krumholz, Sara Grioni, Domenico Palli, José M Huerta, Jackie Price, Johan Sundström, Larraitz Arriola, Hisatomi Arima, Ruth C Travis, Demosthenes B Panagiotakos, Anna Karakatsani, Antonia Trichopoulou, Tilman Kühn, Diederick E Grobbee, Elizabeth Barrett-Connor, Natasja van Schoor, Heiner Boeing, Kim Overvad, Jussi Kauhanen, Nick Wareham, Claudia Langenberg, Nita Forouhi, Maria Wennberg, Jean-Pierre Després, Mary Cushman, Jackie A Cooper, Carlos J Rodriguez, Masaru Sakurai, Jonathan E Shaw, Matthew Knuiman, Trudy Voortman, Christa Meisinger, Anne Tjønneland, Hermann Brenner, Luigi Palmieri, Jean Dallongeville, Eric J Brunner, Gerd Assmann, Maurizio Trevisan, Richard F Gillum, Ian Ford, Naveed Sattar, Mariana Lazo, Simon G Thompson, Pietro Ferrari, David A Leon, George Davey Smith, Richard Peto, Rod Jackson, Emily Banks, Emanuele Di Angelantonio, John Danesh, for the Emerging Risk Factors Collaboration/EPIC-CVD/UK Biobank Alcohol Study Group**

Metaanalyse 2018: „Es gibt keinen risikolosen Konsum!“

Wood, AM et al., Lancet 2018; 391: 1513–23; Published: April 14, 2018 DOI:https://doi.org/10.1016/S0140-6736(18)30134-X

- 83 Studien: ERF Collaboration, EPIC-CVD und U.K. Biobank
- n = 599 912 Teilnehmer, durchschnittlich 7,5 Jahre Follow-up
- n = 40 310 Todesfälle and 39 018 neue Fälle von CVD
- **Resultate:** mehr Alkohol = höheres Risiko für Gesamtsterblichkeit, Schlaganfall, “KHK ohne MI”, Herzinsuffizienz, Tod durch Hypertonie, Tod durch Aortenaneurysma
- **Fazit:** Es sind strengere Grenzwerte für den Alkoholkonsum nötig! Am besten wäre die Empfehlung zur Abstinenz!

Alkoholkonsum und Gesamtmortalität bzw. CVD

Wood, AM et al., Lancet 2018; 391: 1513–23; Published: April 14, 2018 DOI:https://doi.org/10.1016/S0140-6736(18)30134-X

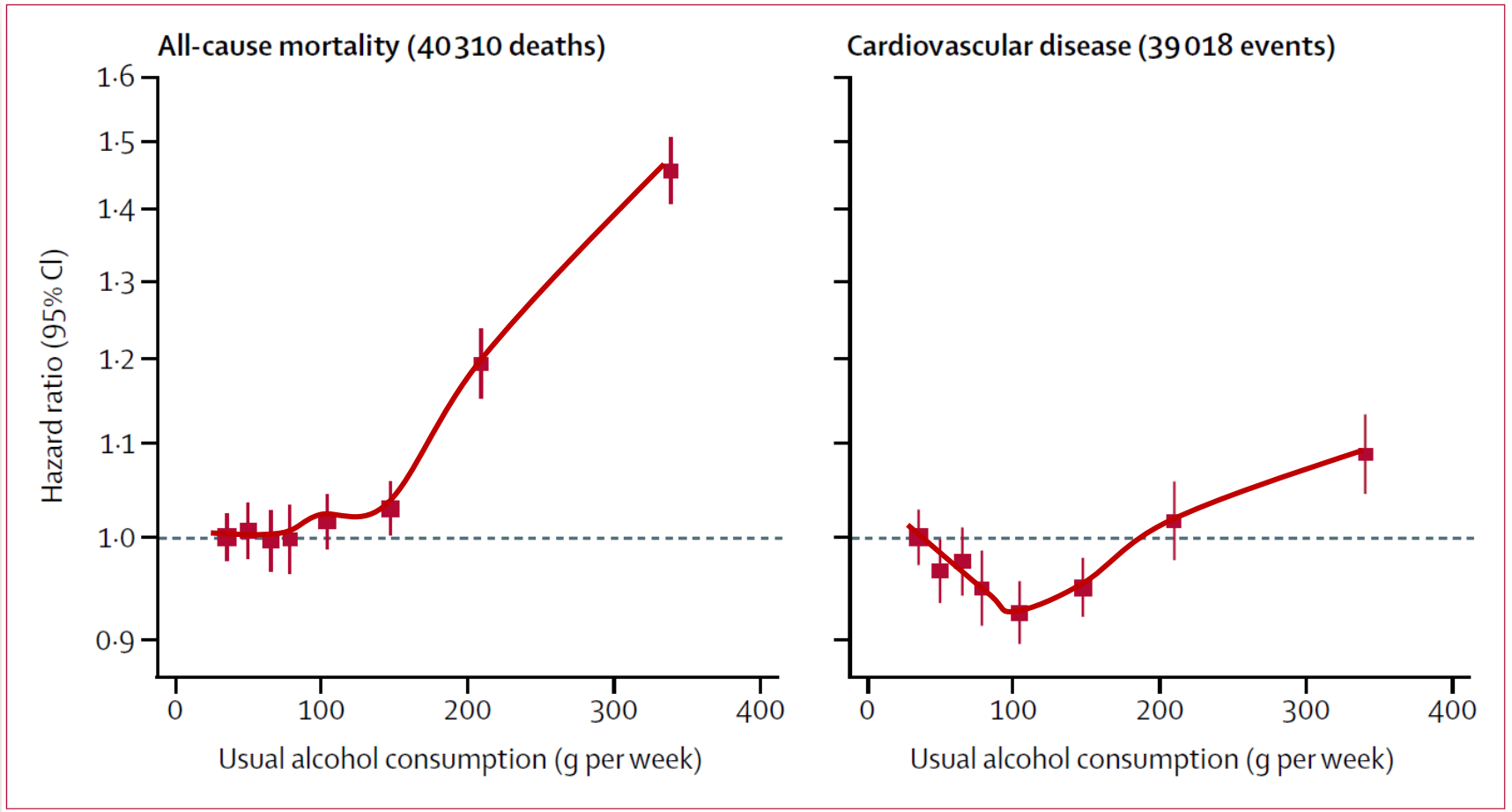


Figure 1: **Associations of usual alcohol consumption with all-cause mortality and the aggregate of**

Wood, A et al., Lancet 2018; 391: 1513–23

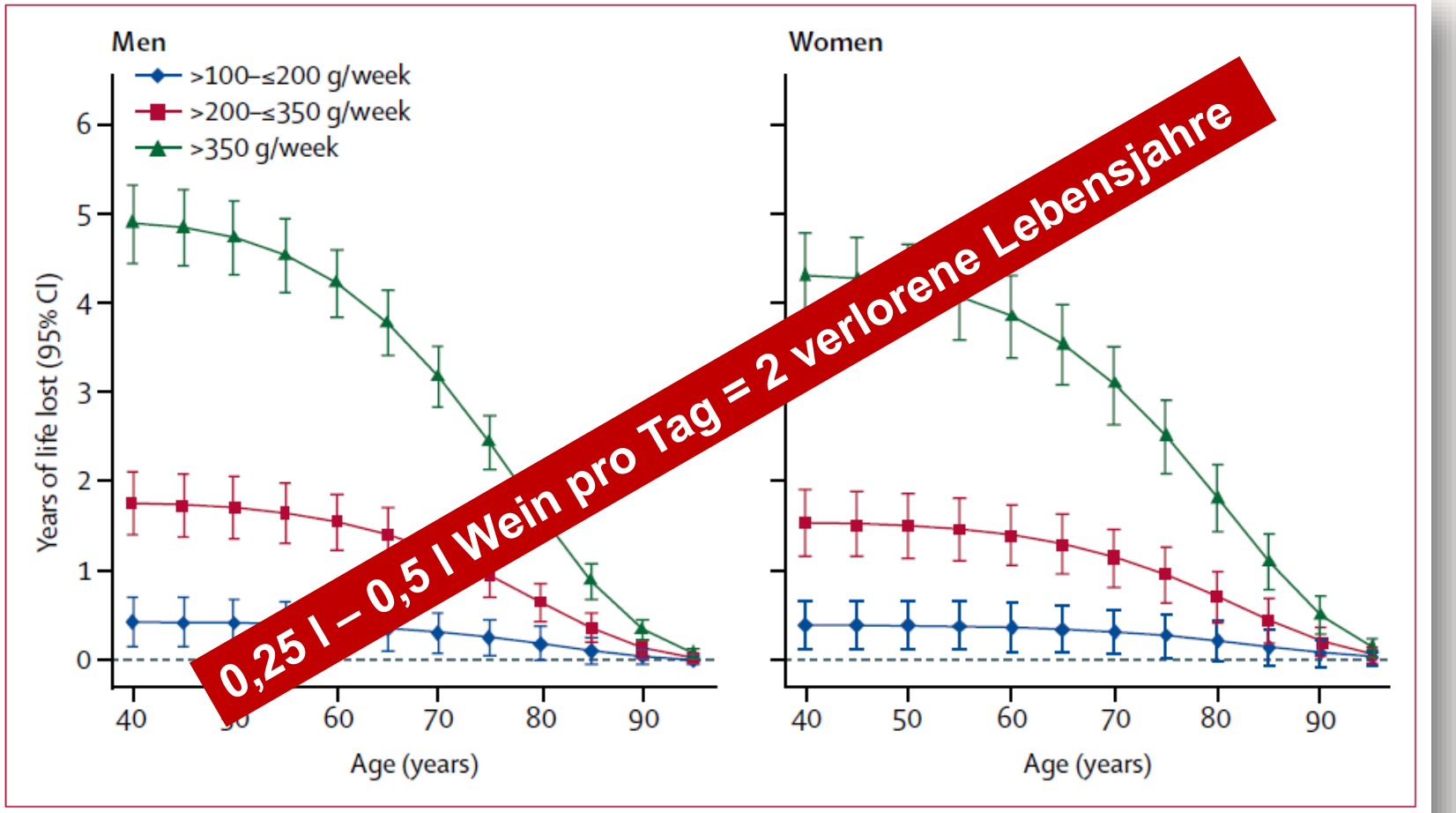


***Figure 4*: Estimated future years of life lost by extent of reported baseline alcohol consumption compared with those who reported consuming >0–≤100 g per week**

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.

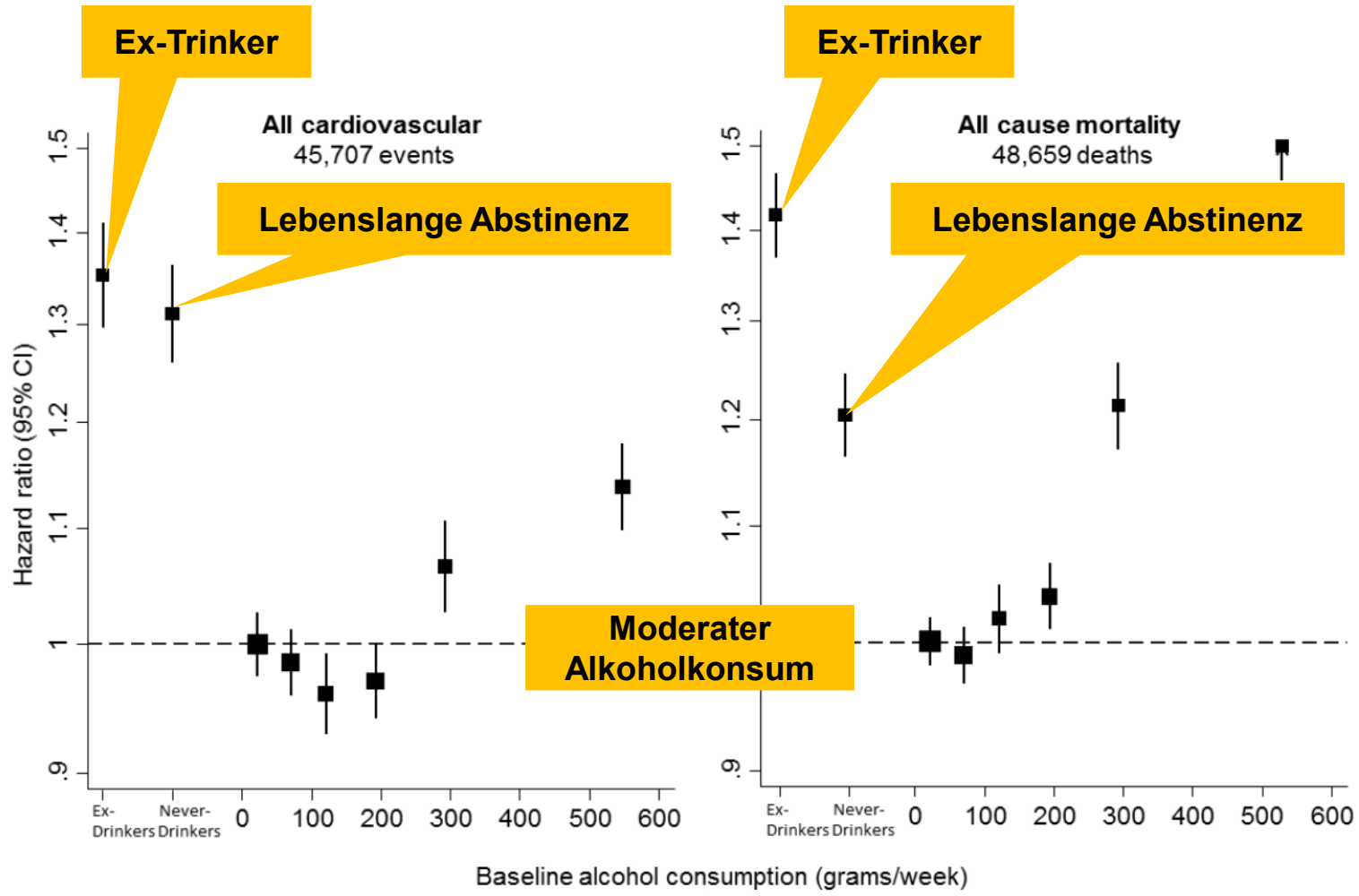
prevention first

Methodik der Wood-Studie: Kritikpunkte

Wood, AM et al., Lancet 2018; 391: 1513–23; Published: April 14, 2018 DOI:https://doi.org/10.1016/S0140-6736(18)30134-X

- Hoher Anteil von **Briten** (Engländer und Schotten trinken „anders“)
- Unpräziser Maßstab: Alkoholkonsum **pro Woche**
- Sehr **heterogene Datenerhebung** in den insgesamt 83 Studien
- Lebenserwartung wurde nicht gemessen, sondern „hochgerechnet“
- Risiko = 1,0 für den moderaten Konsum (1-100 g Alkohol/Woche)
- **Unterschlagung von 186 875 Personen**, die **KEINEN** Alkohol tranken
- Wo stecken die Abstinenzler? ***…auf Seite 31 im Supplement***

eFigure 10: Shape of association between baseline alcohol consumption, including ex- and non-drinkers, with all cardiovascular disease and all-cause mortality.



Adjusted for age, smoking and history of diabetes, and stratified by sex and EPIC centre. Alcohol consumption categories amongst current drinkers were >0-≤50 grams/week, >50-≤100 grams/week, >100-≤150 grams/week, >150-≤250 grams/week, >250-≤350 grams/week and >350 grams/week. The reference category is the lowest baseline alcohol consumption category (>0 and ≤50g/week). Studies with fewer than five events of any outcome were excluded from the analysis of that outcome. The sizes of the boxes are proportional to the inverse of the variance of the log-transformed hazard ratios. Vertical lines represent 95% CIs. Individuals for whom we were unable to distinguish as ex- or never- drinkers were excluded from the analysis.

Wood, A et al., Lancet 2018; 391: 1513–23

prevention first

Nationale Akademie der Wissenschaften der USA: Review neuer Studien von 2019-2023

National Academies of Sciences, Engineering, and Medicine. 2025. Review of Evidence on Alcohol and Health. Washington, DC: The National Academies Press. https://doi.org/10.17226/28582

„Eine wichtige Voraussetzung für diese Datenanalyse war, dass eine Vergleichsgruppe gebildet wurde, die Nie-Trinker von ehemaligen Trinkern trennte, um „Abstinenzverzerrungen“ zu vermeiden.“

Moderater Alkoholkonsum (multivariat adjustiert)

1 Drink/Tag = 14 g/Tag für Frauen
2 Drinks/Tag = 28 g/Tag für Männer

National Academy of Sciences USA: Alkohol und Gesamtsterblichkeit, Review neuer Studien von 2019-2023

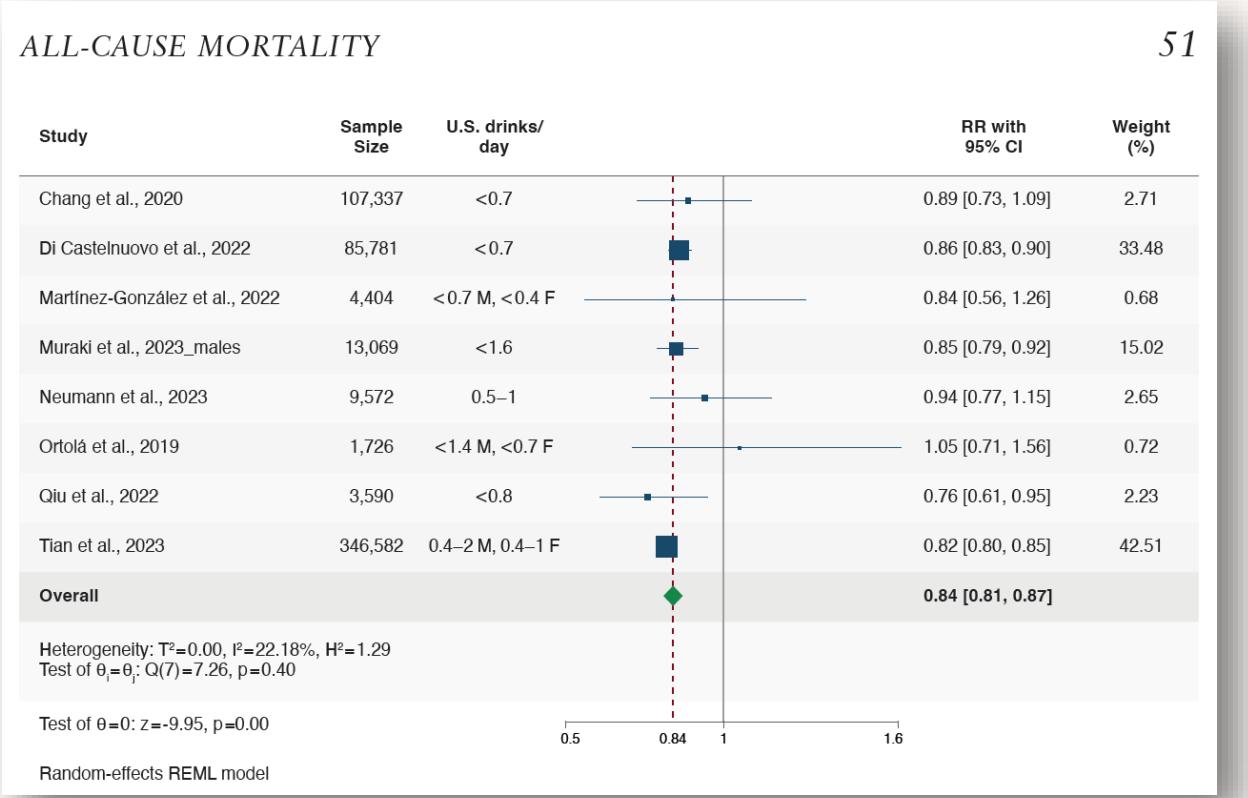
Im Vergleich zu lebenslanger Abstinenz hatte ein moderater Alkoholkonsum folgende Relative Risiken:

Herzinfarkt-Todesfälle: -22%

Schlaganfall-Todesfälle: -11%

Herz-Kreislauf-Todesfälle: -18%

Gesamtsterblichkeit: -16%



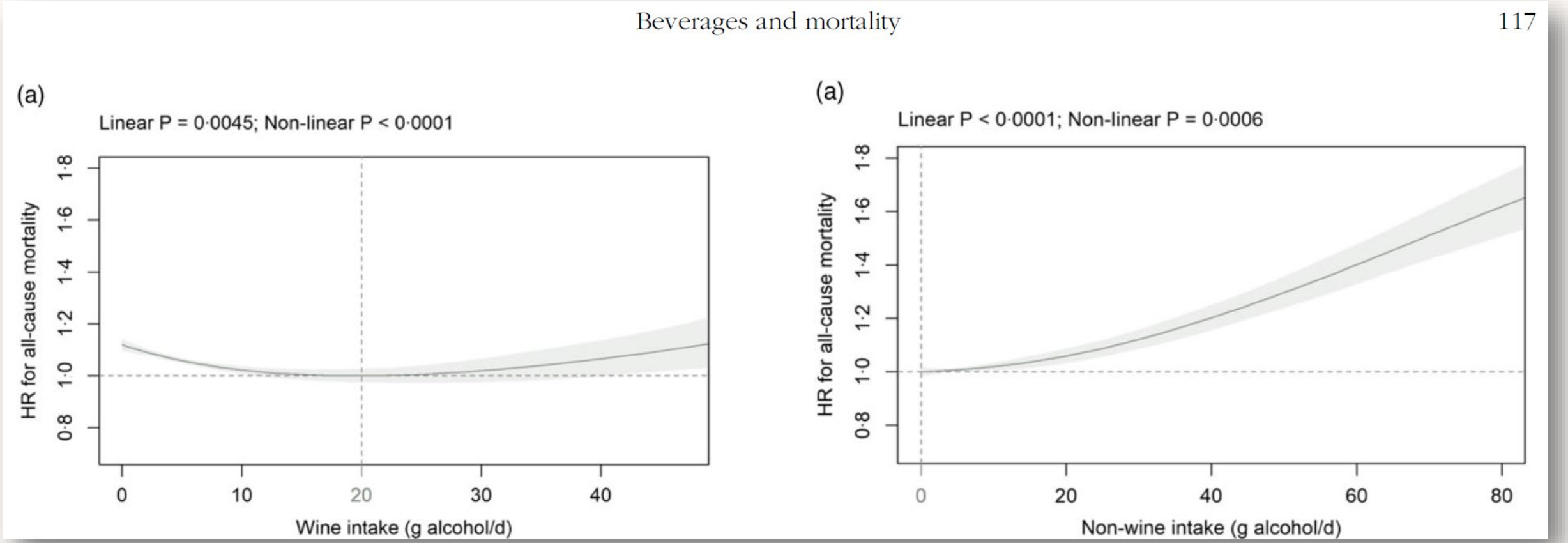
U.K. Biobank: Wein, „Nicht-Wein-Alkohol“, Kaffee, Tee

Schaefer SM et al., British Journal of Nutrition (2023), 129, 115–125. https://doi.org/10.1017/S000711452200040X

- 354 386 Teilnehmende an der UK Biobank Studie
- Mindestens gelegentlicher Alkoholkonsum
- Ausschluss von Todesfällen innerhalb der ersten zwei Jahre
- Follow-up 12 Jahre
- 20 201 Todesfälle über 4,2 Mio. Personen-Jahre
- Unterscheidung in der Abstinenzgruppe Ex-Trinker und Niemals-Trinker
- „Kohorte S1“: Analyse nur für lebenslange Abstinenz

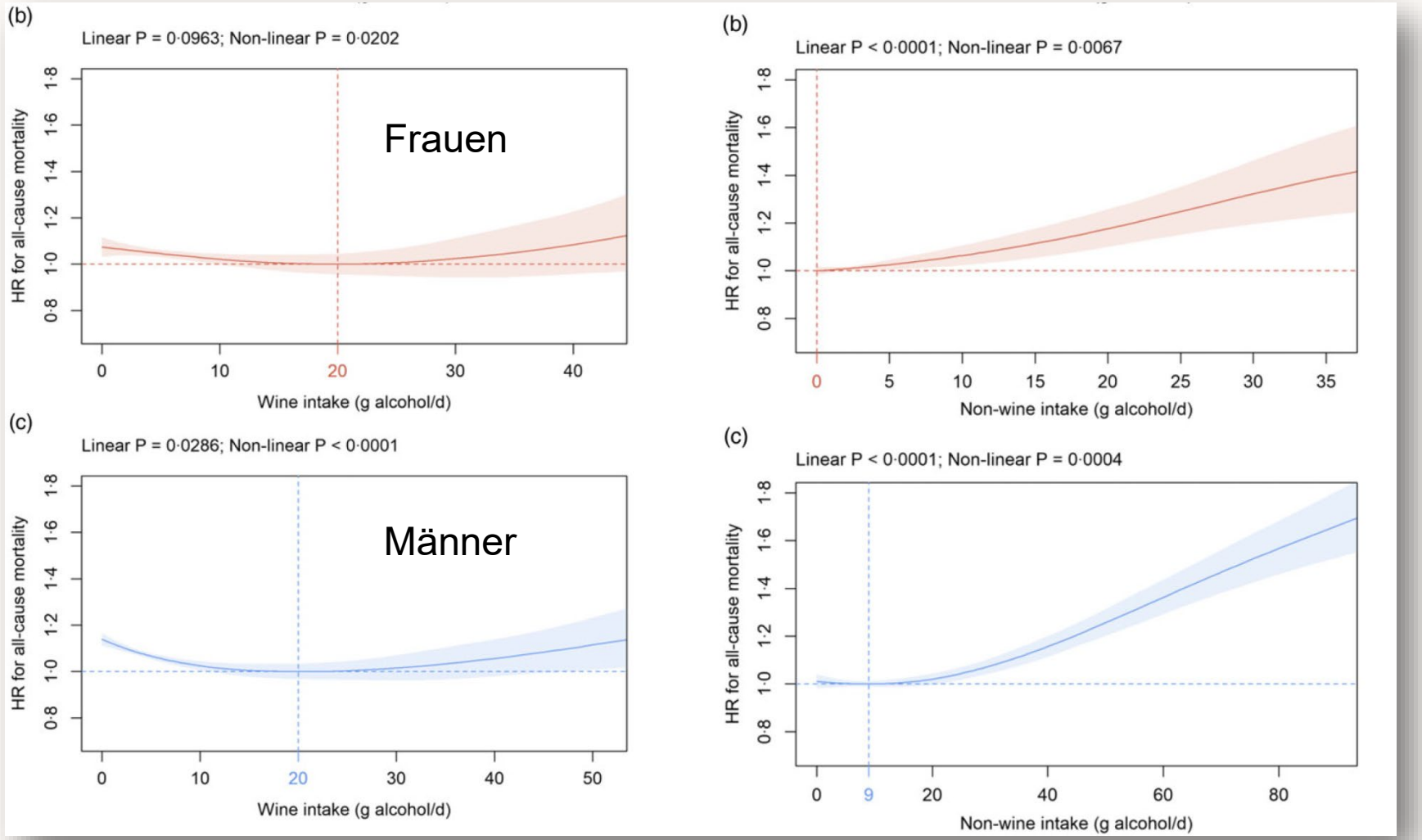
U.K. Biobank: Wein vs. „Nicht-Wein-Alkohol“

Schaefer SM et al., British Journal of Nutrition (2023), 129, 115–125. https://doi.org/10.1017/S000711452200040X



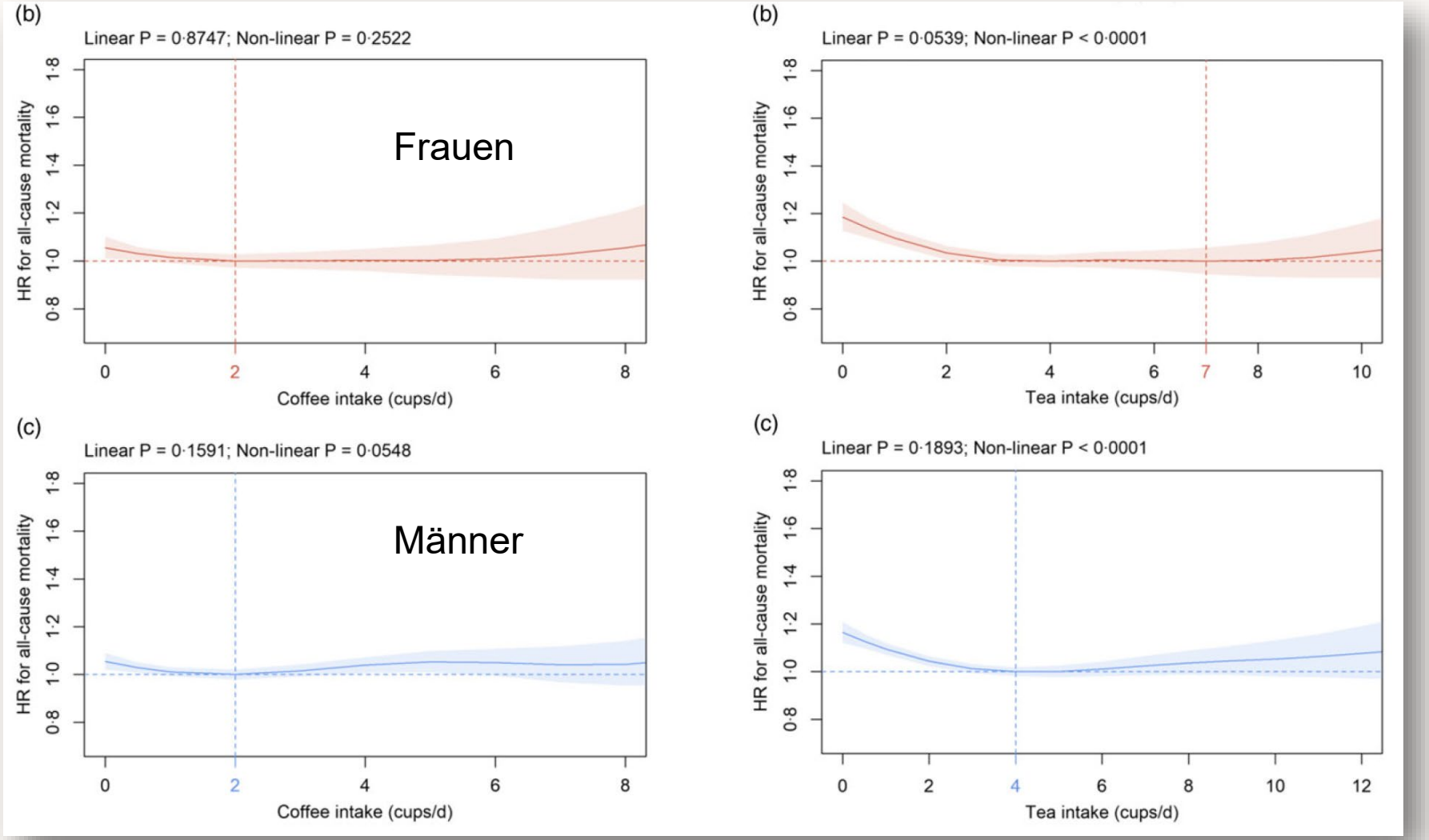
U.K. Biobank: Wein vs. „Nicht-Wein-Alkohol“

Schaefer SM et al., British Journal of Nutrition (2023), 129, 115–125. https://doi.org/10.1017/S000711452200040X



U.K. Biobank: Kaffee, Tee

Schaefer SM et al., British Journal of Nutrition (2023), 129, 115–125. https://doi.org/10.1017/S000711452200040X



U.K. Biobank: Wein erhöht nicht das Krebsrisiko (Daten wieder nur im Supplement)

Schaefer SM et al., British Journal of Nutrition (2023), 129, 115–125. https://doi.org/10.1017/S000711452200040X

Supplementary Table 2 Association of beverage intake with cancer mortality[1]

Beverage	Primary cohort									Cohort S1			Cohort S2		
	P^{lin} / $P^{non\text{-}lin}$	nadir	HR^0	HR at intake						P^{lin} / $P^{non\text{-}lin}$	nadir	HR^0	P^{lin} / $P^{non\text{-}lin}$	nadir	HR^0
Wine				**10**	**20**	**30**	**40**	**50**	**60**						
All	0.2978 / 0.2558	14	1.05 (1.02, 1.08)	1.00 (0.98, 1.02)	1.00 (0.97, 1.04)	1.02 (0.96, 1.09)	1.04 (0.96, 1.14)	1.06 (0.94, 1.20)	1.08 (0.91, 1.28)	0.2616 / 0.0600	14	1.07 (1.04, 1.10)	0.3109 / **0.0005**	16	1.11 (1.08, 1.13)
Female	0.6086 / 0.7113	4	1.00 (0.95, 1.05)	1.00 (0.97, 1.03)	1.02 (0.96, 1.07)	1.03 (0.93, 1.14)	1.03 (0.88, 1.21)	1.01 (0.79, 1.30)	0.99 (0.69, 1.40)	0.5727 / 0.5197	11	1.04 (1.00, 1.09)	0.6225 / 0.1137	14	1.08 (1.04, 1.12)
Male	0.3748 / 0.0841	17	1.09 (1.06, 1.13)	1.01 (0.98, 1.04)	1.00 (0.95, 1.05)	1.02 (0.95, 1.10)	1.05 (0.95, 1.17)	1.09 (0.94, 1.26)	1.12 (0.93, 1.36)	0.3464 / 0.0595	17	1.10 (1.06, 1.13)	0.3832 / **0.0035**	17	1.13 (1.10, 1.16)
Non-Wine				**10**	**20**	**30**	**40**	**50**	**60**						
All	**<0.0001** / 0.0610	0	1.00 (0.98, 1.02)	1.02 (1.00, 1.04)	1.06 (1.03, 1.10)	1.13 (1.08, 1.18)	1.21 (1.14, 1.28)	1.30 (1.22, 1.39)	1.40 (1.30, 1.52)	**<0.0001** / 0.0602	1	1.00 (0.98, 1.02)	**<0.0001** / 0.0537	11	1.02 (1.00, 1.04)
Female	**0.0017** / 0.1802	0	1.00 (0.98, 1.02)	1.04 (0.99, 1.10)	1.14 (1.05, 1.25)	1.26 (1.10, 1.44)	1.31 (1.08, 1.58)	1.30 (0.99, 1.70)	1.36 (0.97, 1.90)	**0.0020** / 0.3648	3	1.00 (0.98, 1.03)	**0.0045** / 0.5583	6	1.02 (1.00, 1.04)
Male	**<0.0001** / 0.0728	3	1.00 (0.96, 1.04)	1.01 (0.99, 1.02)	1.03 (1.00, 1.07)	1.09 (1.05, 1.14)	1.18 (1.11, 1.24)	1.28 (1.20, 1.36)	1.38 (1.28, 1.49)	**<0.0001** / 0.0530	6	1.00 (0.96, 1.04)	**<0.0001** / **0.0182**	14	1.04 (1.01, 1.08)

prevention first

U.K. Biobank: Wein senkt das Herz-Kreislauf-Risiko

Schaefer SM et al., British Journal of Nutrition (2023), 129, 115–125. https://doi.org/10.1017/S000711452200040X

Supplementary Table 4 Association of beverage intake with CVD mortality[1]

Beverage	Primary cohort									Cohort S1			Cohort S2		
	P^{lin} / $P^{non\text{-}lin}$	nadir	HR^0	HR at intake						P^{lin} / $P^{non\text{-}lin}$	nadir	HR^0	P^{lin} / $P^{non\text{-}lin}$	nadir	HR^0
Wine				**10**	**20**	**30**	**40**	**50**	**60**						
All	0.7612 / **0.0004**	20	1.22 (1.16, 1.28)	1.05 (1.01, 1.08)	1.00 (0.94, 1.06)	1.03 (0.93, 1.15)	1.09 (0.93, 1.27)	1.12 (0.91, 1.38)	1.14 (0.86, 1.50)	0.6862 / **<0.0001**	19	1.28 (1.22, 1.33)	0.7552 / **<0.0001**	19	1.32 (1.27, 1.37)
Female	0.4298 / **0.0439**	19	1.31 (1.17, 1.46)	1.09 (1.02, 1.16)	1.00 (0.88, 1.15)	1.13 (0.88, 1.45)	1.36 (0.95, 1.96)	1.63 (0.97, 2.74)	1.95 (0.99, 3.83)	0.3496 / **0.0003**	19	1.50 (1.36, 1.64)	0.3235 / **<0.0001**	19	1.51 (1.40, 1.64)
Male	0.9431 / **0.0031**	21	1.20 (1.14 1.26)	1.04 (1.00, 1.08)	1.00 (0.93, 1.08)	1.01 (0.90, 1.14)	1.03 (0.87, 1.22)	1.04 (0.83, 1.30)	1.02 (0.76, 1.39)	0.9504 / **0.0011**	21	1.21 (1.15, 1.27)	0.9580 / **<0.0001**	20	1.25 (1.19, 1.30)
Non-Wine				**10**	**20**	**30**	**40**	**50**	**60**						
All	**<0.0001** / 0.5215	4	1.00 (0.96, 1.04)	1.00 (0.97, 1.04)	1.03 (0.97, 1.09)	1.08 (1.01, 1.16)	1.15 (1.05, 1.25)	1.23 (1.11, 1.35)	1.30 (1.16, 1.46)	**<0.0001** / 0.4402	12	1.03 (0.99, 1.06)	**<0.0001** / 0.1075	16	1.08 (1.05, 1.11)
Female	0.3146 / 0.8300	9	1.03 (0.97, 1.09)	1.00 (0.89, 1.12)	1.05 (0.86, 1.28)	1.18 (0.88, 1.59)	1.30 (0.87, 1.94)	1.34 (0.76, 2.35)	1.33 (0.65, 2.71)	0.3545 / 0.5315	13	1.13 (1.08, 1.18)	0.3239 / 0.4776	13	1.14 (1.09, 1.19)
Male	**<0.0001** / 0.4663	6	1.00 (0.94, 1.07)	1.00 (0.98, 1.03)	1.02 (0.98, 1.07)	1.07 (1.01, 1.14)	1.14 (1.06, 1.24)	1.23 (1.12, 1.35)	1.32 (1.18, 1.47)	**<0.0001** / 0.4045	11	1.02 (0.96, 1.08)	**<0.0001** / 0.1224	17	1.08 (1.03, 1.13)

prevention first

U.K. Biobank: CVD, CKD, Gesamtmortalität

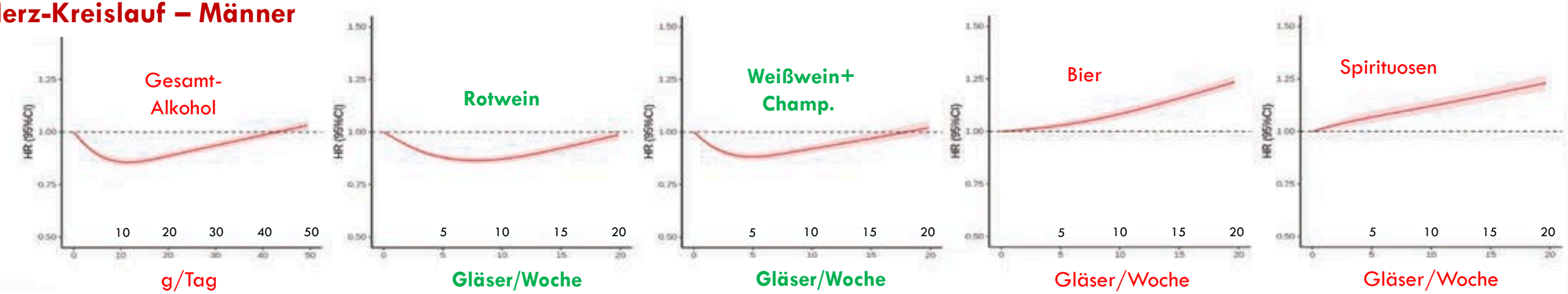
Shao L et al., Medicine 2024; 103(27):e38857. doi: 10.1097/MD.0000000000038857

- UK Biobank, n = 502 490 Teilnehmende
- Erstuntersuchung 2006-2010, Nachuntersuchung 2012-2013
- Fragebogen: Alkohol “gestern”, “pro Woche”, Rotwein, Weißwein, Champagner, Bier, Spirituosen “Fortified Weine”
- Follow-up 12 Jahre
- Endpunkte:
  - Gesamtsterblichkeit: N = 18 923
  - Herz-Kreislauf-Ereignisse: n = 79 558
  - Niereninsuffizienz: n = 2852

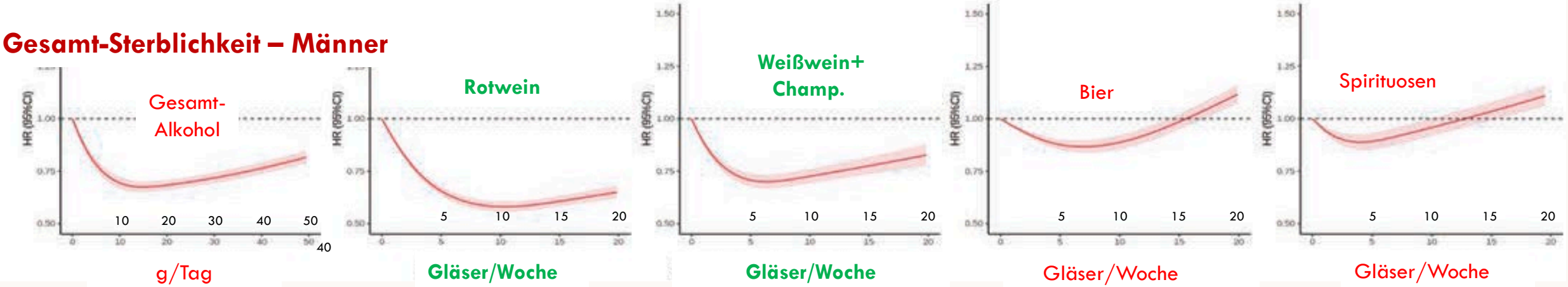
U.K. Biobank: CVD, CKD, Gesamtmortalität

Shao L et al., Medicine 2024; 103(27):e38857. doi: 10.1097/MD.0000000000038857

Herz-Kreislauf – Männer



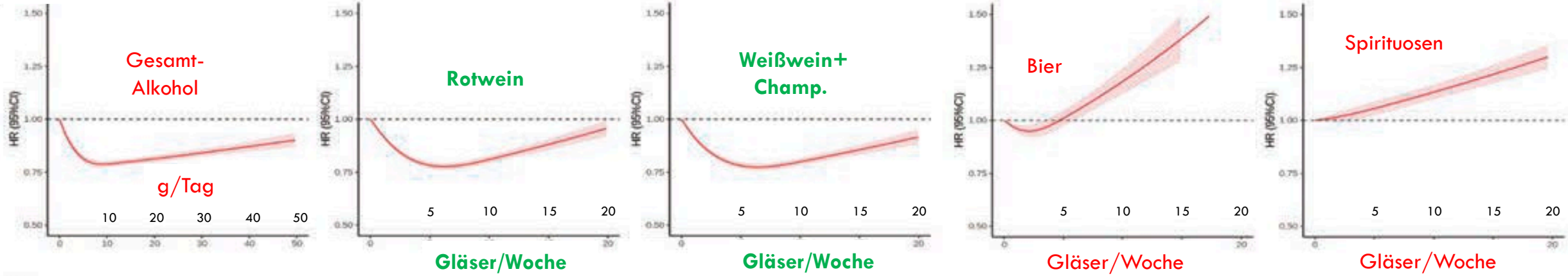
Gesamt-Sterblichkeit – Männer



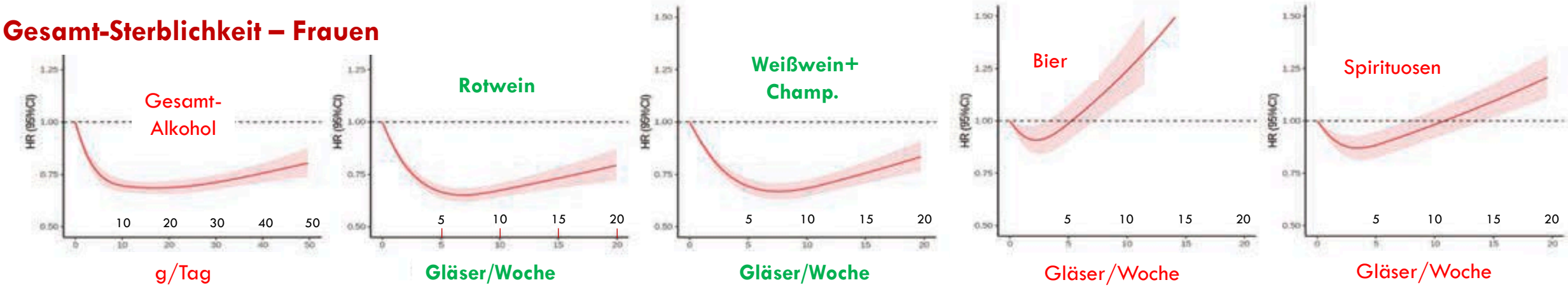
U.K. Biobank: CVD, CKD, Gesamtmortalität

Shao L et al., Medicine 2024; 103(27):e38857. doi: 10.1097/MD.0000000000038857

Herz-Kreislauf – Frauen



Gesamt-Sterblichkeit – Frauen



Sichere Alkoholdosis Männer – Ausschluss von Ex-Trinkern (Daten nur im Supplement)

Shao L et al., Medicine 2024; 103(27):e38857. doi: 10.1097/MD.0000000000038857

Supplemental table2A Threshold of safe dose of alcohol consumption for male excluding former drinker.

	Cutoff	Subgroup	CKD			CVD			All-cause mortality		
			Case/Total	HR(95%CI)	P value	Case/Total	HR(95%CI)	P value	Case/Total	HR(95%CI)	P value
Total alohol intake	11	0 g/day	4913/146133	1[Ref]	-	12561/34735	1[Ref]	-	4143/48452	1[Ref]	-
		0 - 11 g/day	963/35652	0.87(0.81,0.93)	0.0002	11698/34622	0.86(0.84,0.89)	< 0.0001	3280/46276	0.79(0.75,0.82)	< 0.0001
		more than 11 g/day	653/28279	0.76(0.70,0.83)	< 0.0001	34171/94290	0.94(0.92,0.96)	< 0.0001	9379/126266	0.79(0.76,0.82)	< 0.0001
Red wine intake	7	0 glasses/week	3641/97195	1[Ref]	-	27286/73493	1[Ref]	-	9389/102188	1[Ref]	-
		0 - 7 glasses/week	2166/81731	0.71(0.67,0.75)	< 0.0001	22007/65543	0.86(0.85,0.88)	< 0.0001	5349/86222	0.68(0.66,0.71)	< 0.0001
		more than 7 glasses/week	722/31138	0.61(0.56,0.66)	< 0.0001	9137/24611	0.94(0.92,0.97)	< 0.0001	2064/32584	0.65(0.62,0.68)	< 0.0001
champagne plus white wine intake	5	0 glasses/week	4647/134382	1[Ref]	-	37580/102356	1[Ref]	-	11824/141215	1[Ref]	-
		0 - 5 glasses/week	1416/55777	0.77(0.72,0.81)	< 0.0001	15097/45201	0.89(0.87,0.91)	< 0.0001	3614/58874	0.78(0.75,0.81)	< 0.0001
		more than 5 glasses/week	466/19905	0.74(0.67,0.82)	< 0.0001	5753/16090	0.98(0.95,1)	0.0869	1364/20905	0.82(0.78,0.87)	< 0.0001
Beer intake	0	-	6529/210064	0.89(0.87,0.91)	< 0.0001	54390/152502	1.07(1.06,1.07)	< 0.0001	15707/206031	1.1(1.08,1.11)	< 0.0001
Spirits intake	0	-	6529/210064	0.99(0.97,1.01)	0.2939	58430/163647	1.04(1.03,1.04)	< 0.0001	16802/220994	1.07(1.06,1.08)	< 0.0001
Fortified wine intake	4	0 glasses/week	6141/195910	1[Ref]	-	58430/163647	1[Ref]	-	16802/220994	1[Ref]	-
		0 - 4 glasses/week	337/12717	0.80(0.71,0.89)	0.0001	3592/10090	0.92(0.89,0.95)	< 0.0001	951/13450	0.89(0.83,0.95)	0.0005
		more than 4 glasses/week	51/1437	0.90(0.68,1.18)	0.4414	448/1055	1.01(0.92,1.11)	0.7949	144/1513	0.97(0.82,1.14)	0.7137

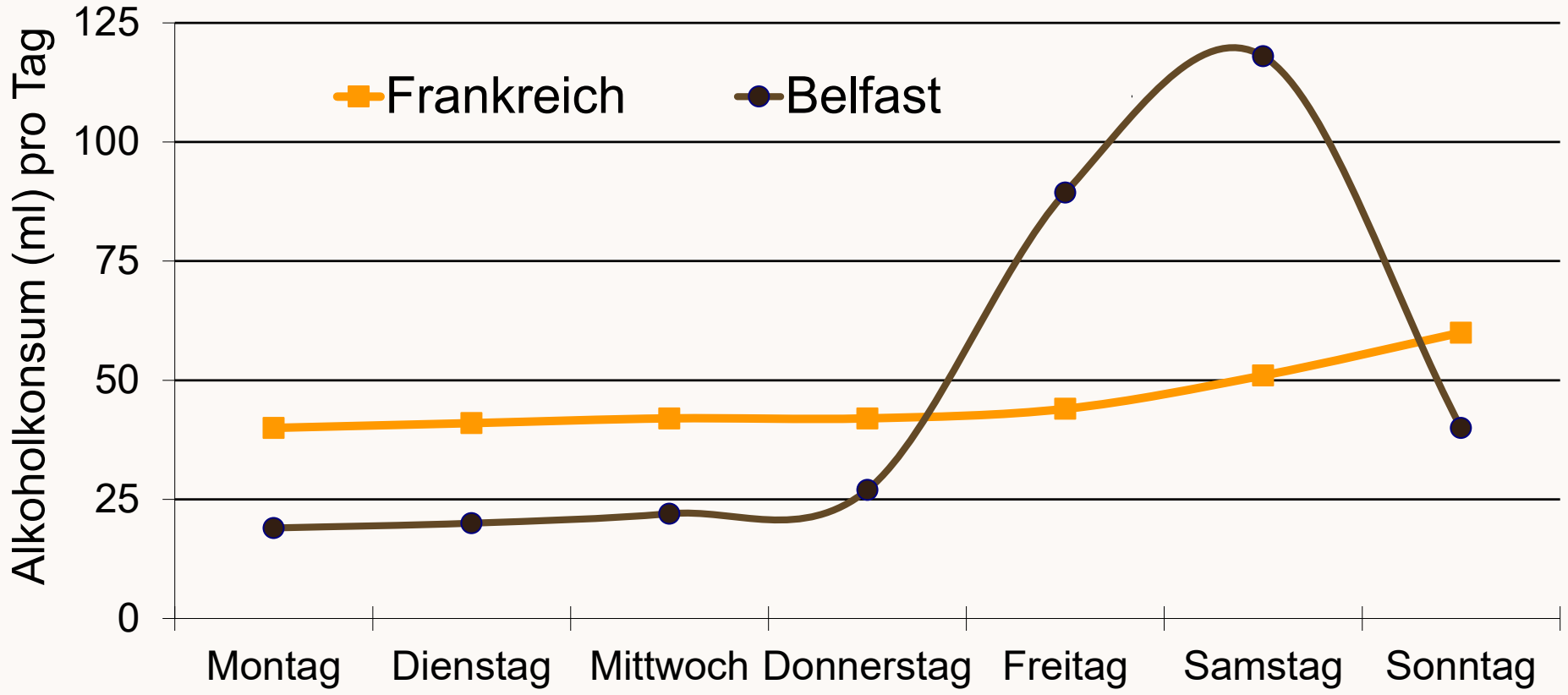
CKD= chronic kidney disease; CVD= cardiovascular disease; HR= hazard ratio; CI= confidence interval.

Adjusted for UK region, the year of examination, age (years), gender (female, male), education level (university, high school, others), smoking status (smoking, not smoking), diet score, and exercise score.

The beer intake and spirits intake was z-transformed.The unit of beer intake intake was pints/day and spirits intake was glasses/week.

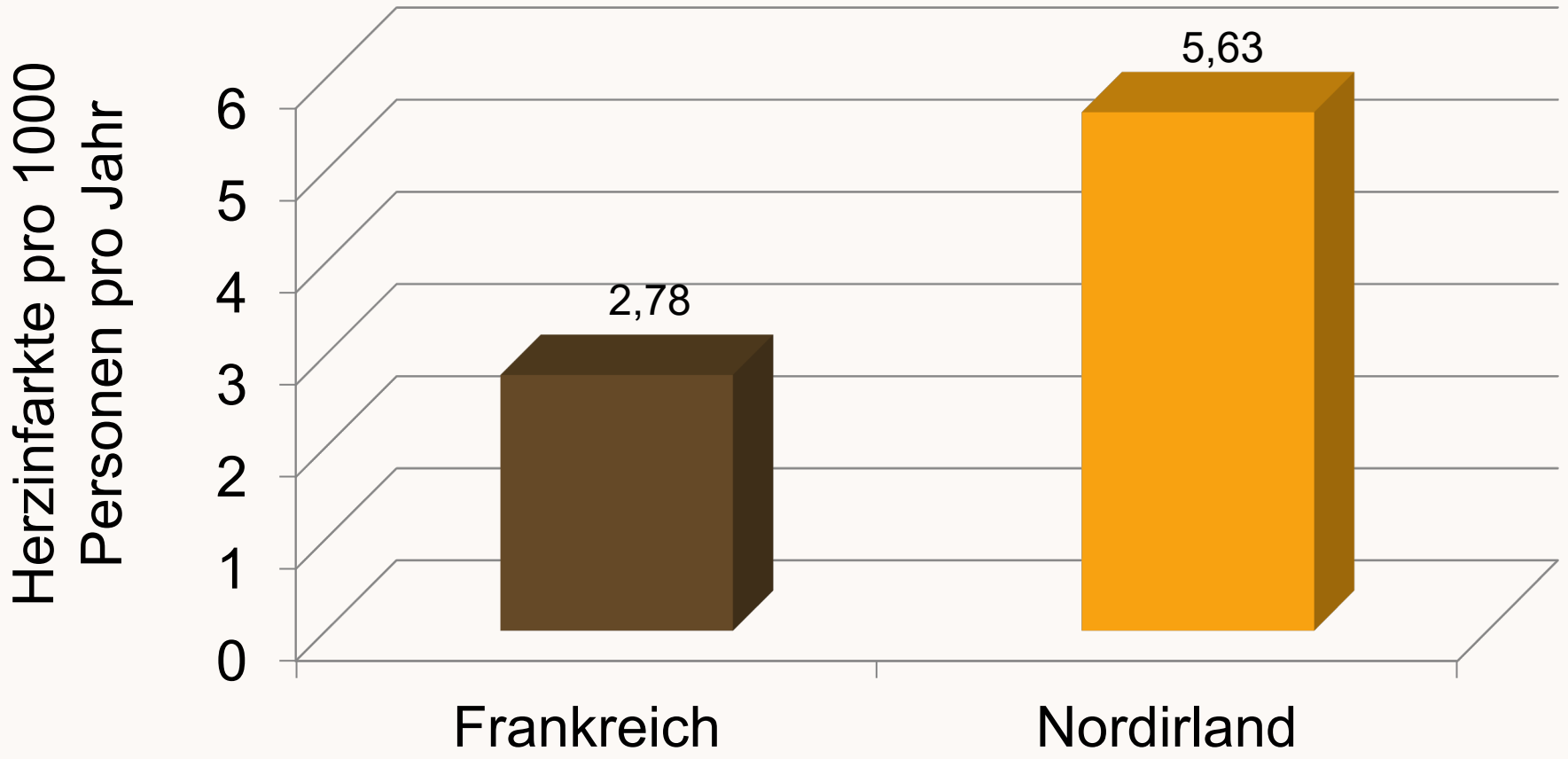
Belfast (Nordirland) und Frankreich in der PRIME-Study 2000

Marques-Vidal, P et al.; Eur J Clin Nutr 2000; 54: 321-328



PRIME-Study 2010: 10 Jahre Follow-up
Trinkmuster und Herzinfarktrate

Ruidavets P et al.; BMJ 2010; 341:c6077 (published 23.11.2010)



Mediterranean Alcohol Drinking Pattern: SUN-Study, Navarra, Spanien

Gea A, Estruch R et. al., British Journal of Nutrition 2014, doi:10.1017/S0007114513004376

Kohortenstudie, 18 394 Teilnehmer, FFQ, Follow-up 12 Jahre, 208 Todesfälle

British Journal of Nutrition, page 1 of 10

doi:10.1017/S0007114513004376

Mediterranean alcohol-drinking pattern and mortality in the SUN (Seguimiento Universidad de Navarra) Project: a prospective cohort study

Alfredo Gea[1], Maira Bes-Rastrollo[1,2], Estefania Toledo[1,2], Martin Garcia-Lopez[3], Juan J. Beunza[1,4], Ramon Estruch[2,5] and Miguel A. Martinez-Gonzalez[1,2]*

[1]*Department of Preventive Medicine and Public Health, School of Medicine-Clínica, University of Navarra, Irunlarrea 1, Pamplona 31008, Navarra, Spain*
[2]*CIBER Fisiopatología de la Obesidad y Nutrición (CIBERObn), Instituto de Salud Carlos III, Madrid, Spain*
[3]*Department of Cardiology, Clinica University of Navarra, Pamplona, Spain*
[4]*School of Medicine, Universidad Europea de Madrid, Madrid, Spain*
[5]*Department of Internal Medicine, Hospital Clinic, University of Barcelona, Barcelona, Spain*

(Submitted 2 September 2013 – Final revision received 25 November 2013 – Accepted 13 December 2013)

Gea A, Estruch R et. al., Br J Nutr 2014, doi:10.1017/S0007114513004376

Table 1. Score of the Mediterranean alcohol-drinking pattern

Items	Criteria	Score
Moderate alcohol intake (g/d)*		
	Low intake: women >0–5 g/d; men >0–10 g/d	1 point
	Moderate intake: women 5–25 g/d; men 10–50 g/d	2 points
	High intake: women >25 g/d; men >50 g/d	0 points
Alcohol consumption spread out over the week (d/week:g/week ratio)†		
	Evenly distributed: in Q4	2 points
	Moderately distributed: in Q2–Q3	1 point
	Not distributed: in Q1	0 points
Low spirit consumption (alcohol from spirits/total alcohol)‡		
	Low spirit consumption: <25 %	1 point
	High spirit consumption: ≥25 %	0 points
Wine preference (alcohol from wine/total alcohol)§		
	Wine preference: ≥75 %	1 point
	No wine preference: <75 %	0 points
Wine consumed preferably with meals (wine with meals/total wine)‖		
	Preferably with meals: ≥75 %	1 point
	Out of meals: <75 %	0 points
Preference for red wine over other types of wine (red wine/total wine)¶		
	Red wine preference: ≥75 %	1 point
	No red wine preference: <75 %	0 points
No excess consumption (maximum drinks in a single occasion)**		
	No excess: ≤5 drinks in a single occasion	1 point
	Any excess: >5 drinks in a single occasion	0 points

Gea A, Estruch R et. al., Br J Nutr 2014, doi:10.1017/S0007114513004376

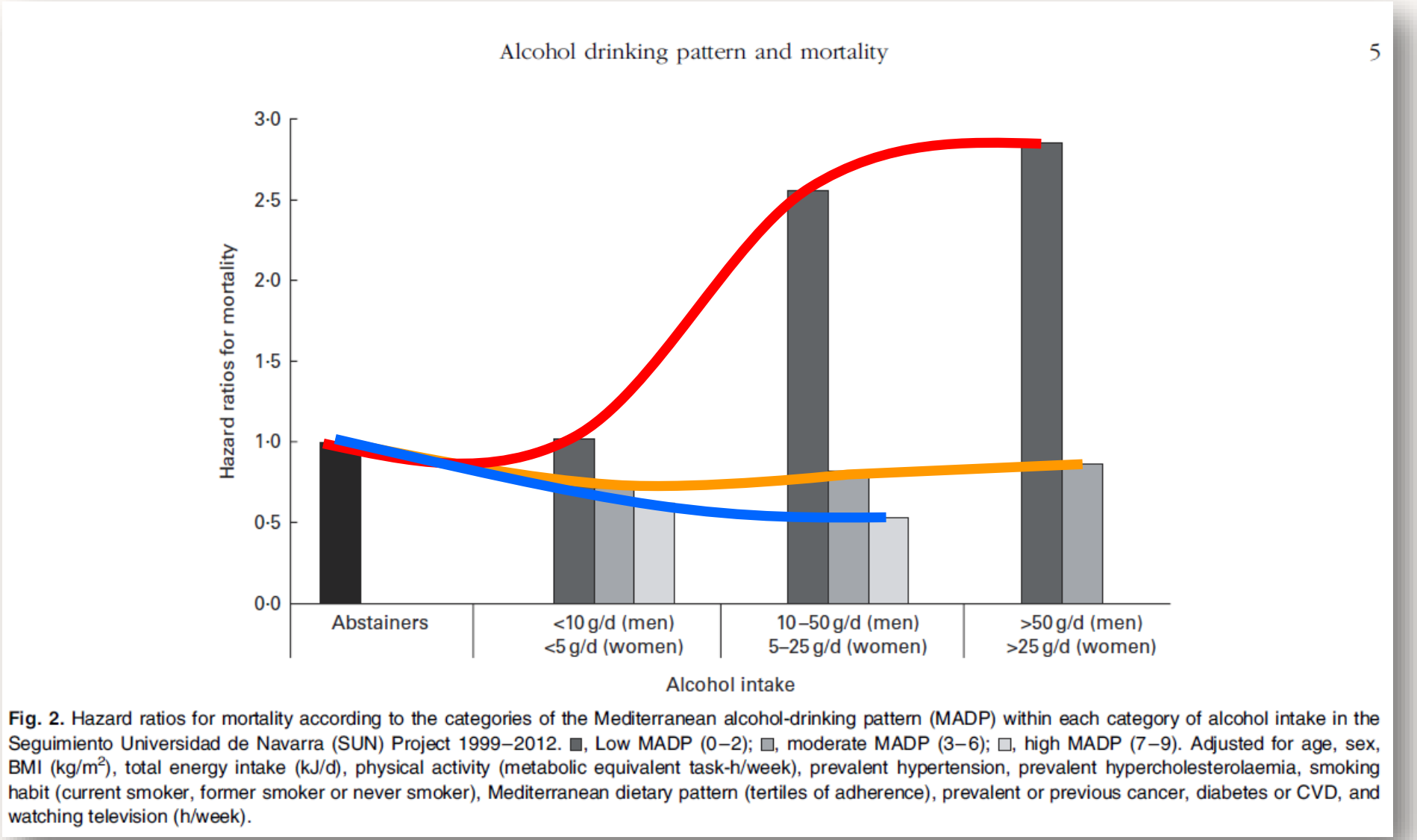


Fig. 2. Hazard ratios for mortality according to the categories of the Mediterranean alcohol-drinking pattern (MADP) within each category of alcohol intake in the Seguimiento Universidad de Navarra (SUN) Project 1999–2012. ■, Low MADP (0–2); ■, moderate MADP (3–6); □, high MADP (7–9). Adjusted for age, sex, BMI (kg/m^2), total energy intake (kJ/d), physical activity (metabolic equivalent task-h/week), prevalent hypertension, prevalent hypercholesterolaemia, smoking habit (current smoker, former smoker or never smoker), Mediterranean dietary pattern (tertiles of adherence), prevalent or previous cancer, diabetes or CVD, and watching television (h/week).

prevention first

Meta-Analyse Alkohol und Gesamt-Mortalität

Di Castelnuovo A et al., Arch Intern Med. 2006;166:2437-2445

REVIEW ARTICLE

Alcohol Dosing and Total Mortality in Men and Women

An Updated Meta-analysis of 34 Prospective Studies

Augusto Di Castelnuovo, ScD; Simona Costanzo, ScD; Vincenzo Bagnardi, ScD; Maria Benedetta Donati, MD, PhD; Licia Iacoviello, MD, PhD; Giovanni de Gaetano, MD, PhD

Background: Moderate consumption of alcohol is inversely related with coronary disease, but its association with mortality is controversial. We performed a meta-analysis of prospective studies on alcohol dosing and total mortality.

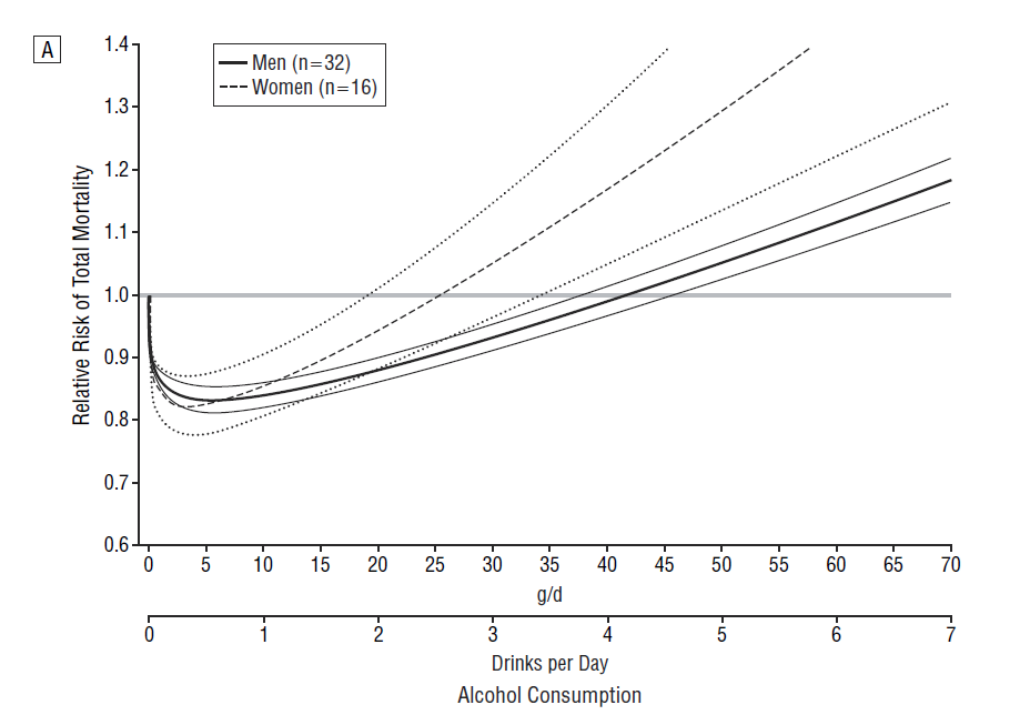
18% in women (99% confidence interval, 13%-22%) and 17% in men (99% confidence interval, 15%-19%). Higher doses of alcohol were associated with increased mortality. The inverse association in women disappeared at doses lower than in men. When adjusted and unadjusted data

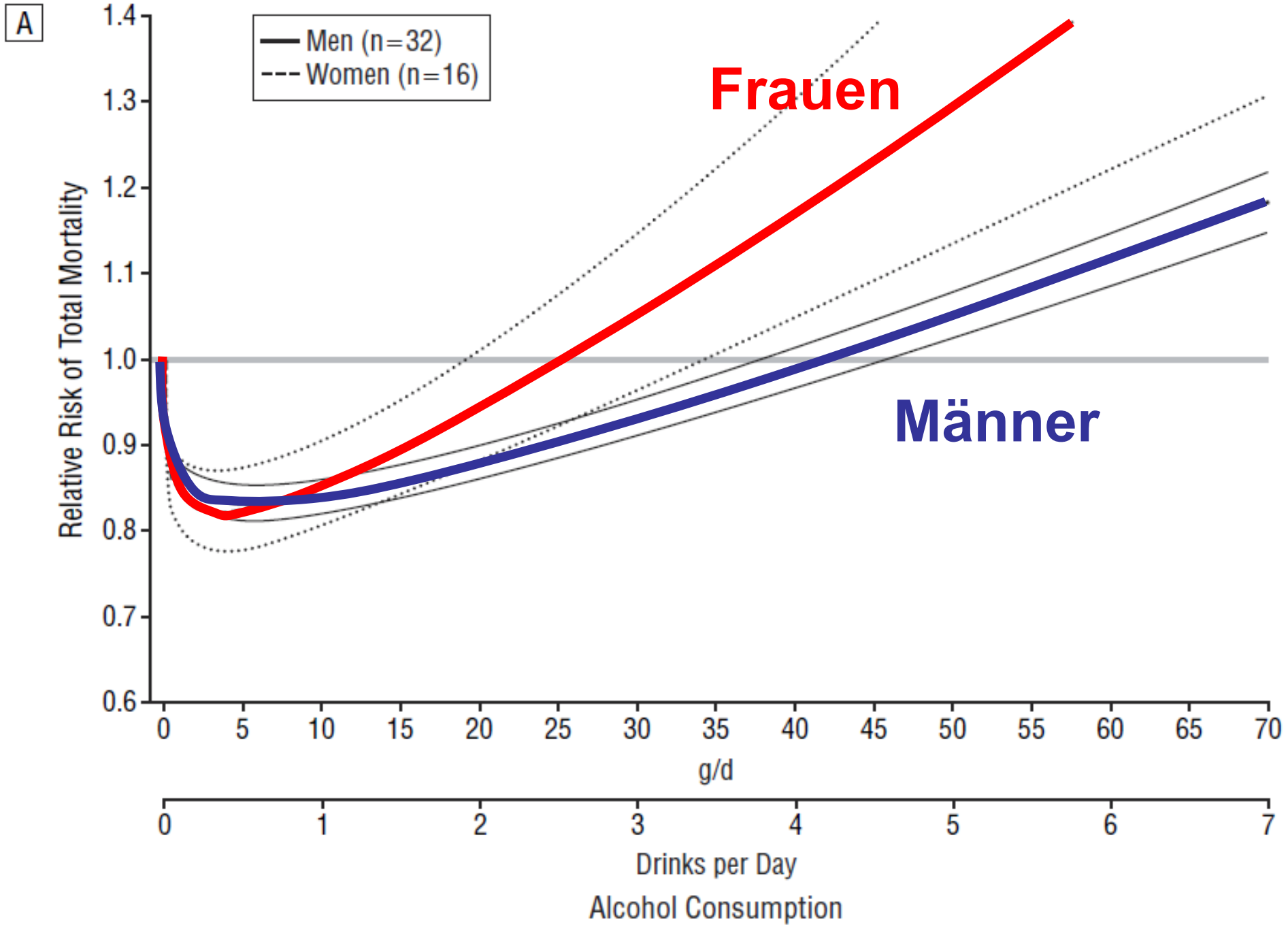
prevention first

Meta-Analyse Alkohol und Gesamt-Mortalität

Di Castelnuovo A et al., Arch Intern Med. 2006;166:2437-2445

- Meta-Analyse von 34 Studien, n = 1 015 835 Teilnehmer
- Follow-up 5,5 – 26 Jahre, 94 533 Todesfälle

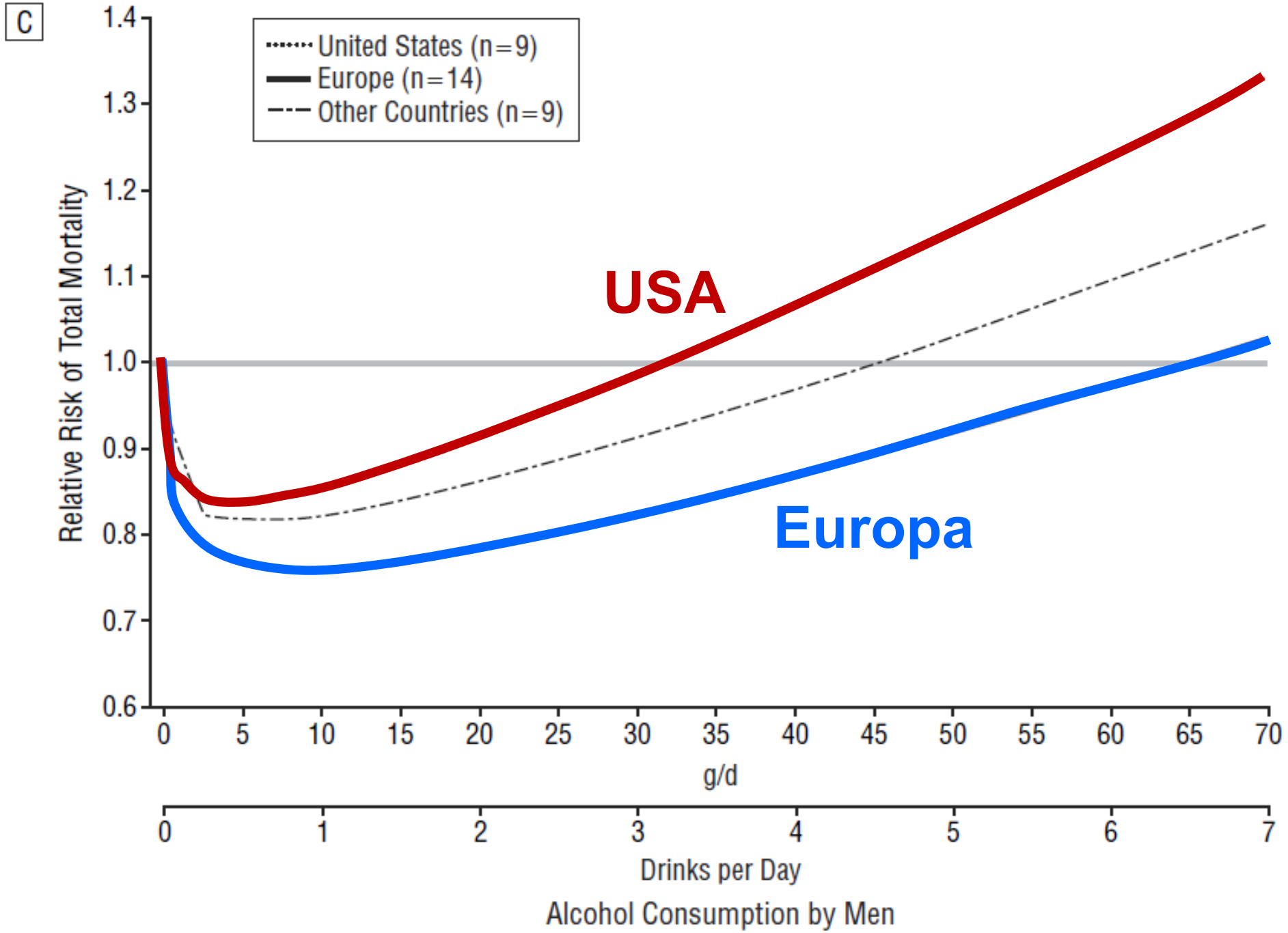




Di Castelnuovo A et al., Arch Intern Med. 2006;166:2437-2445

prevention first

ed. J. Scholl



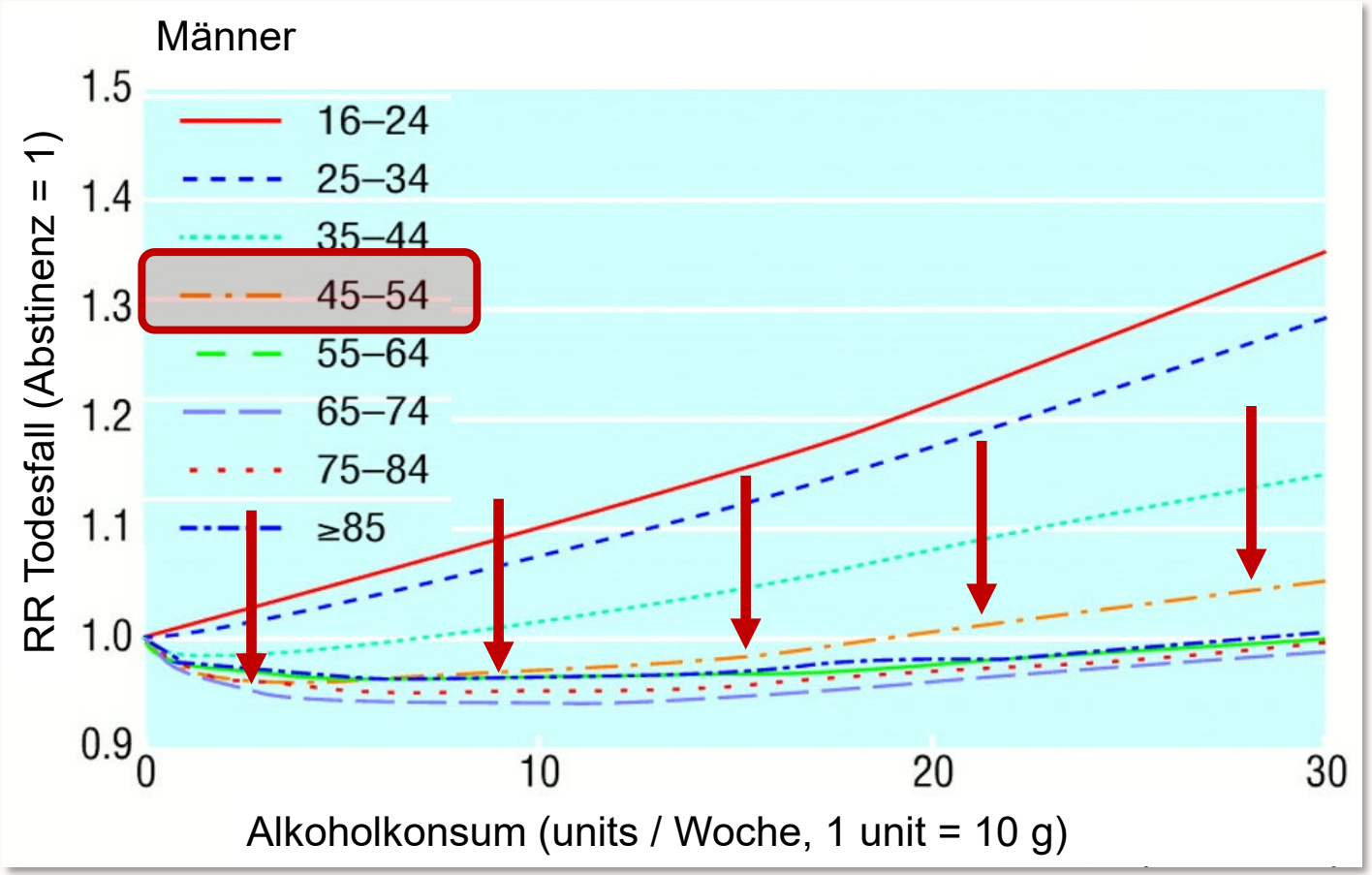
Di Castelnuovo A et al., Arch Intern Med. 2006;166:2437-2445

prevention first

ed. J. Scholl

Alkoholkonsum und Todesfallrisiko: Risikomodelle nach Alter und Geschlecht

White et al., BMJ 2002; 325: 191-198



White et al., BMJ 2002; 325: 191-198

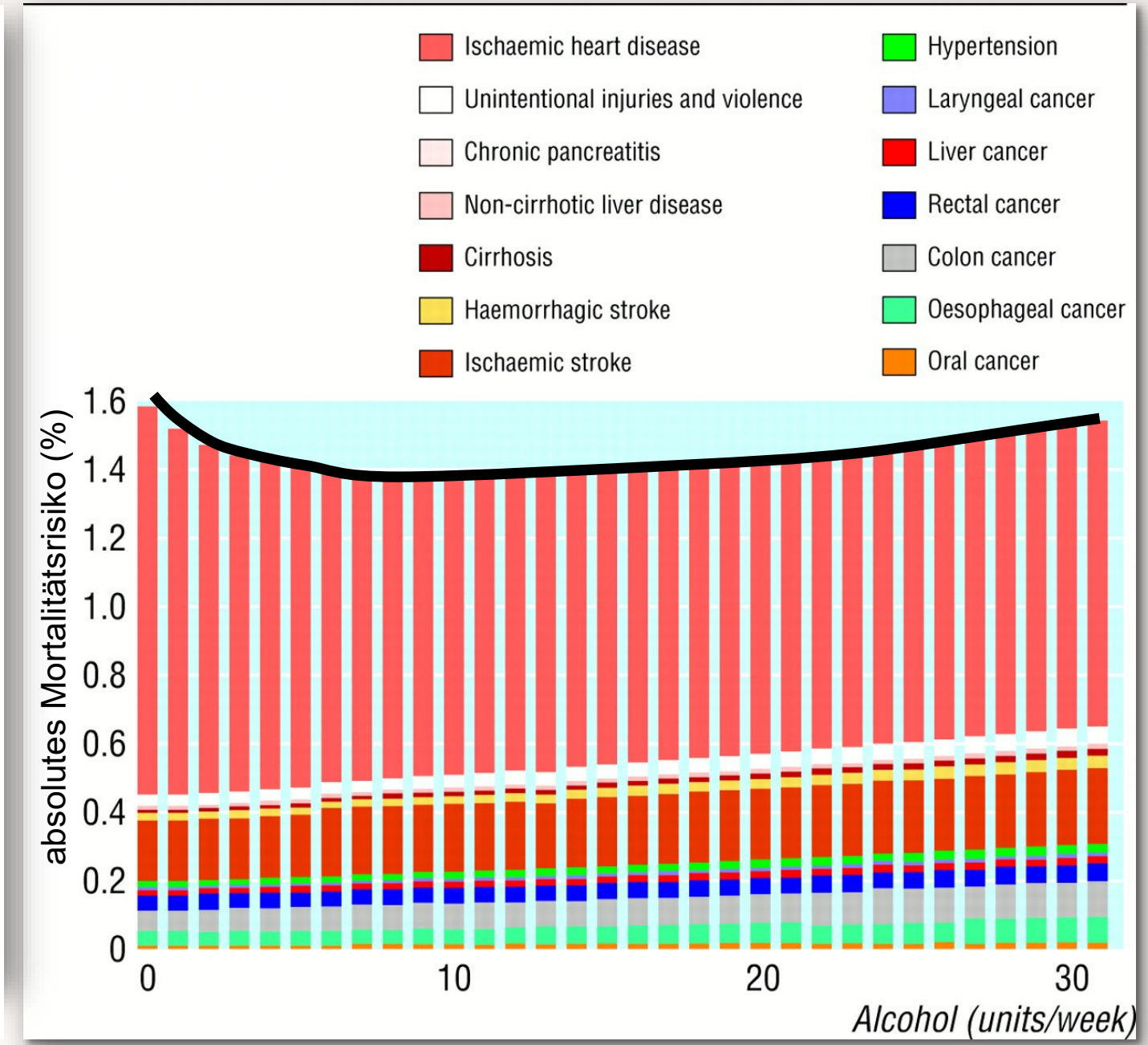


Fig 3 Derivation of all cause risks for men aged 65-74. Height of each bar is total risk of all alcohol related causes. Non-alcohol related causes not shown

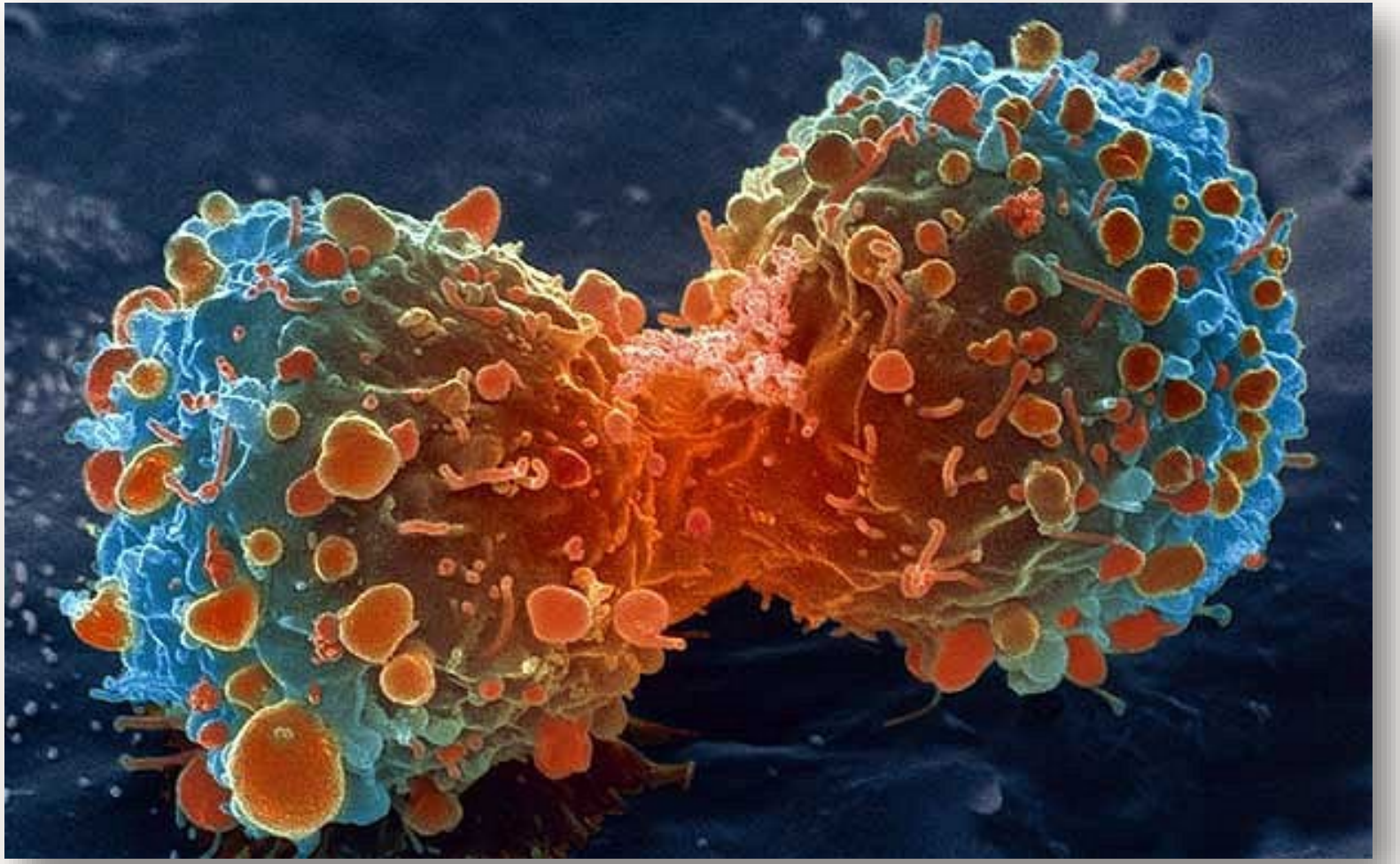
KHK

Apoplex

Krebs

prevention first

Alkohol und Krebserkrankungen



camh Patients and Families Health Info Research Education Professionals Get Involved

Dr. Jürgen Rehm

Senior Scientist

Institute for Mental Health Policy Research

Review 2019: Alkohol und Krebsrisiko

Rehm J et al., Curr NutrRep 2019; published online 20.03.2019, https://doi.org/10.1007/s13668-019-0267-0

CANCER (MF LEITZMANN, SECTION EDITOR)

Does Alcohol Use Affect Cancer Risk?

Jürgen Rehm [1,2,3,4,5,6,7] · Isabelle Soerjomataram [8] · Carina Ferreira-Borges [9] · Kevin D. Shield [1,3,4]

Abstract

Purpose of Review To provide an overview of the risk relationships between alcohol use and cancer and of the alcohol-attributable cancer burden; to highlight areas of controversy in the alcohol–cancer relationship; to examine the reasons why these risk relationships have not received greater public attention.

Recent Findings In 2016, alcohol caused an estimated 376,200 cancer deaths, 10.0 million cancer years of life lost (YLLs), 236,600 cancer years lived with disability (YLDs), and 10.3 million cancer disability-adjusted years of life (DALYs), representing 4.2%, 4.2%, 4.6%, and 4.2% of all deaths, YLLs, YLDs, and DALYs lost due to cancer, respectively, proportionally highest in high- and upper–middle–income countries.

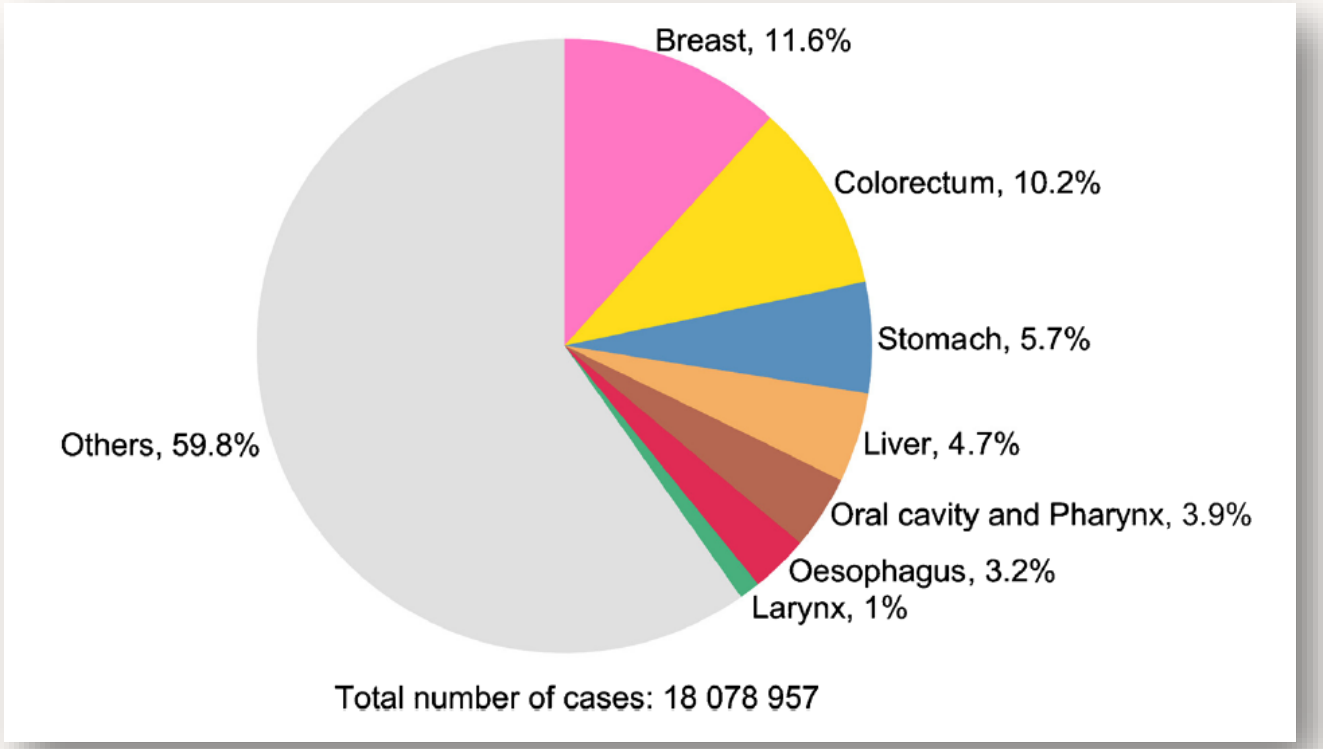
Summary Alcohol use is a major contributor to cancer and is linked to the most prevalent types of cancer. No threshold for the effects of alcohol on cancer has yet been identified, and thus, abstinence is best for cancer prevention. Greater public awareness of the relationship between alcohol use and cancer is advisable.

Mit dem Alkoholkonsum assoziierte Krebstypen
(Quelle: Global Cancer Observatory, WHO)

Rehm J et al., Curr NutrRep **2019**; published online 20.03.2019, https://doi.org/10.1007/s13668-019-0267-0

Mechanismen:

- lokal toxisch in hoher Konzentration: Mund, Pharynx, Larynx, Oesophagus, Magen, v.a. kombiniert mit Rauchen
- Acetaldehyd beim Abbau: intermediäres Zellgift, allgemein
- Steigerung der Oestrogen-Spiegel: Mamma-CA ja, *aber nicht Ovarial-CA*



Quantifizierung des Krebsrisikos durch Alkoholkonsum

Rehm J et al., Curr NutrRep 2019; published online 20.03.2019, https://doi.org/10.1007/s13668-019-0267-0

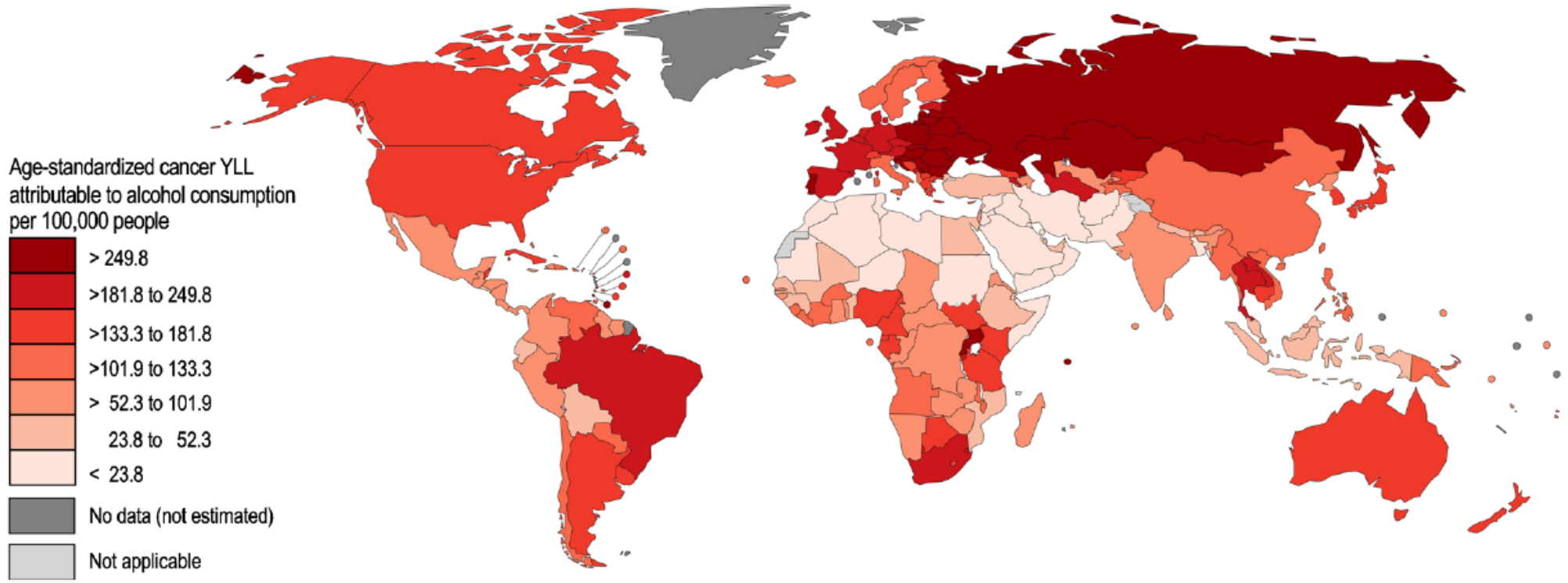


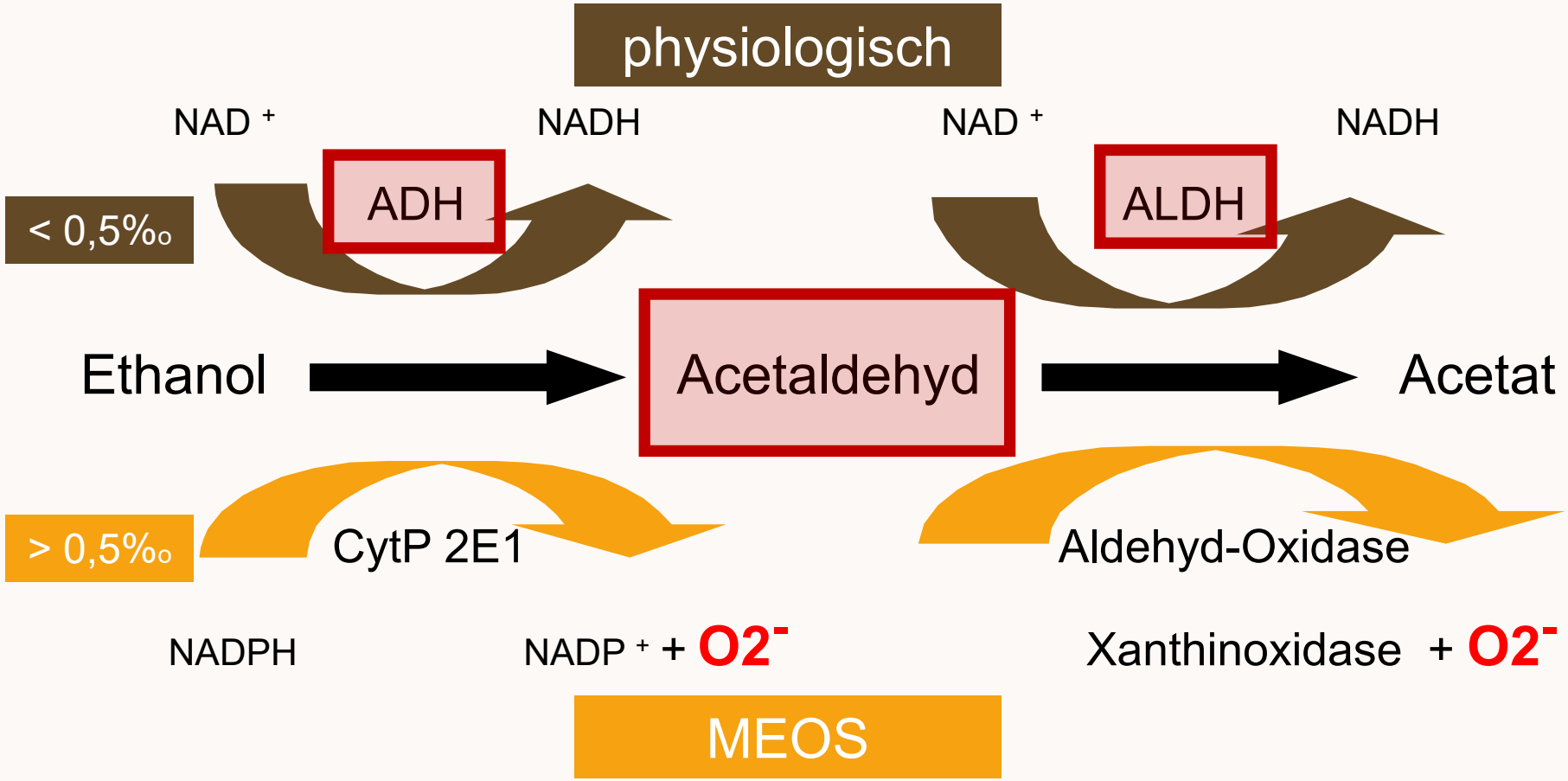
Fig. 2 Years of life lost (YLLs) in 2016 which were caused by cancers attributable to alcohol consumption. Figures represent authors' own calculations based on data within [33•]

Alkoholmetabolismus

nach: Sleisenger, M H et al.; Gastrointestinal and Liver Diseases, 5. Aufl. 1997

Risiko vs. Nutzen

- Tabak ja/nein
- Essen? Was?
- Alkoholmenge + Trinkzeit = Alkoholspiegel
- ADH-Subtyp 1/2
- ALDH-Subtyp 1/2
- Genetik, Familie, Begleiterkrankung



Alkoholkonsum in Deutschland (2016)

WHO 2018; https://www.who.int/substance_abuse/publications/global_alcohol_report/profiles/deu.pdf?ua=1, accessed **21.07.2019**

Age-standardized death rates (ASDR) and alcohol-attributable fractions (AAF), 2016

	ASDR*		AAF (%)		AAD** (Number)
Liver cirrhosis, males / females	18.9	7.8	78.6	66.4	11 115
Road traffic injuries, males / females	6.0	2.4	48.0	33.7	1 424
Cancer, males / females	198.9	131.0	8.0	4.0	14 596

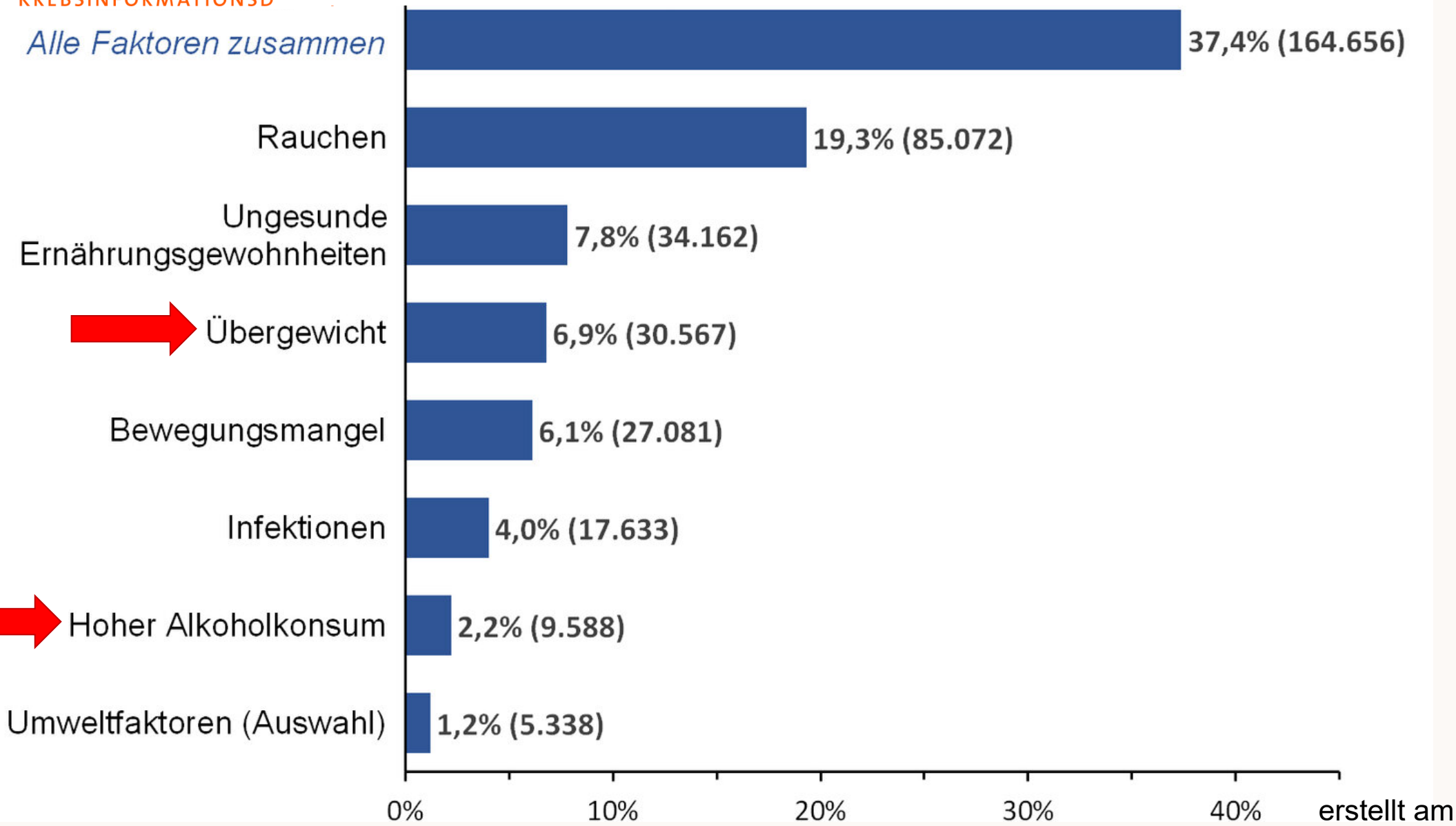
*Per 100 000 population (15+); **alcohol-attributable deaths, both sexes.

Zusätzliche Krebstodesfälle **pro 100 000**: **16** Männer, **5** Frauen

prevention first

dkfz. DEUTSCHES KREBSFORSCHUNGS IN DER HELMHOLTZ-GE
KREBSINFORMATIONSD

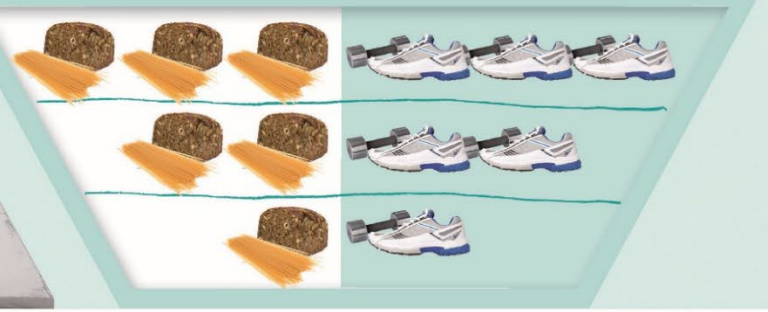
Zahlen und Anteile der durch vermeidbare Krebsrisikofaktoren bedingten Krebsfälle in Deutschland 2018



erstellt am: 03.09.2018

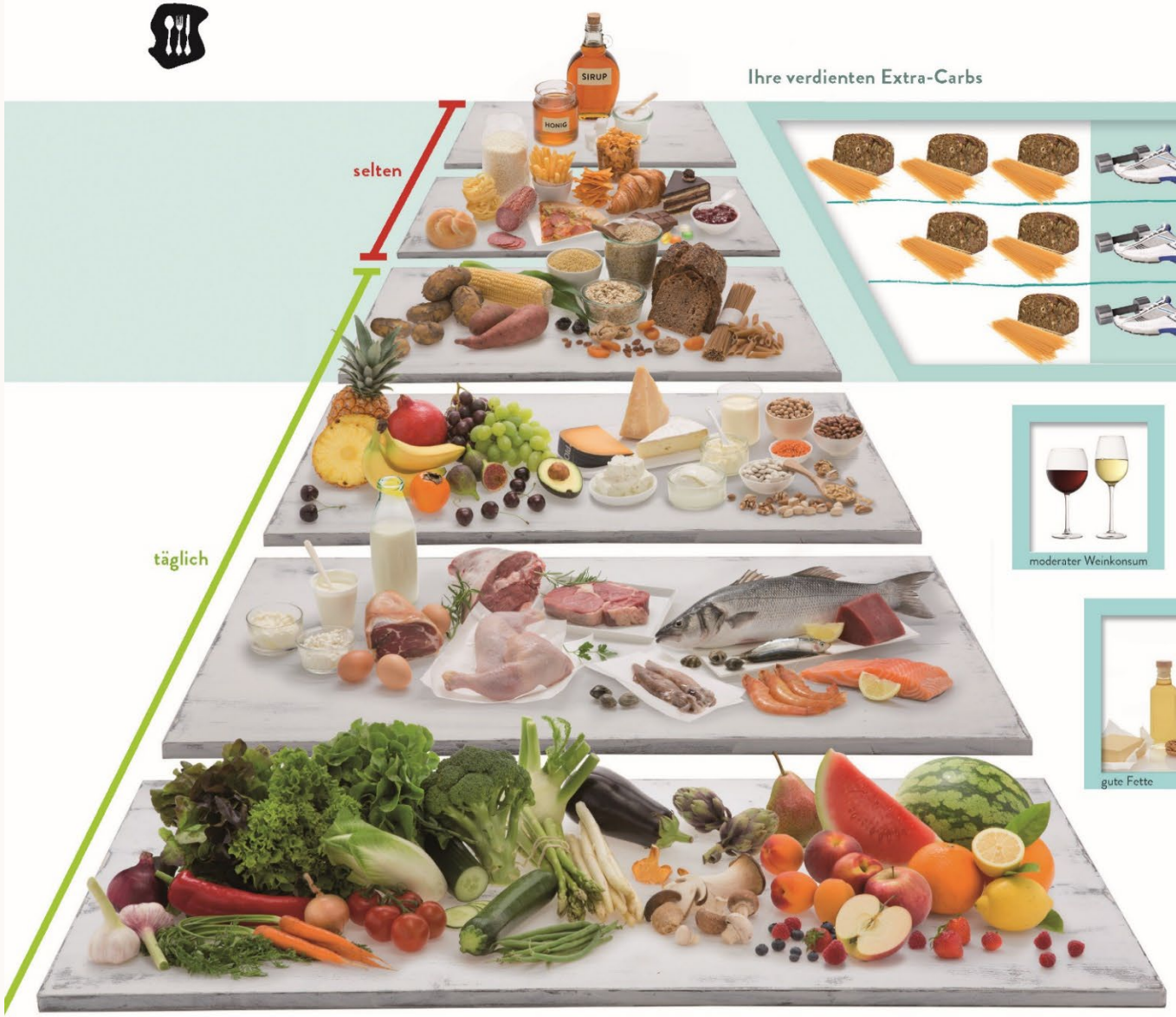
DIE *Flexi*-CARB-PYRAMIDE

Ihre verdienten Extra-Carbs



selten

täglich



moderater Weinkonsum


ausreichend Schlaf


gute Fette


genügend Sonnenlicht

Säfte, Softdrinks

Lightgetränke,
Früchte-Smoothies

Wellnesswasser,
Fruchtsaftschorle

Gemüsesäfte

Schwarzer Kaffee,
grüner Tee

Wasser,
Früchte- und Kräutertee

Flexi-Carb-Pyramide gewichtet nach Energiedichte, Nährstoffdichte, Kohlenhydrate/GI., Verarbeitungsgrad, nach Worm/Lemberger/Mangiameli © riva Verlag, 2015

Moderater Weingenuss

als Teil eines gesunden Lebensstils

Dr. med. Johannes Scholl

www.preventionfirst.de