Efectos protectores del consumo moderado de vino sobre la salud: evidencias científicas frente a las amenazas

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Rev Clin Esp. 2019;xxx(xx):xxx–xxx

ELSEVIER

Revista Clínica Española

www.elsevier.es/rce

REVISIÓN

Alcohol, salud y enfermedad cardiovascular

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Caucasus
Shulaveri Gora
Lake Van
Mount Ararat
Cova de l'Esperit
Montou
Scafta Piana
Torre Canne
Sitagroi
Kanesh
Melid
Hajji Firuz Tepe
Godin Tepe
Cova de
les Cendres
Los Millares
Uzzo
Sesklo
Dimini
Franchthi
Çatalhöyük
TAURUS
Kurban Höyük
ZAGROS
Ebla
Euphrates
Tigris
Jemdet Nasr
Anshan
Sippar
Lagash
Ur
Saint-Andreas
Khirokitia
Cyprus
Crete
Megiddo
Haifa
Tell Ta'annek
Khallet e-Gazaz
Tell Shuna
Gibeon
Tulaylat al-Ghassul
Buto
Tell Ibrahim Awad
Egypt

En el siglo XXI el consumo regular de vino, cerveza, licores o champan en comidas o actividades de ocio, se ha convertido en una práctica estandarizada del mundo occidental, y no es sorprendente que no haya una ceremonia, acto social y ocasionalmente académico, que no se acompañe de una bebida alcohólica

EQUIVALENCE OF ALCOHOLIC DRINKS

1 SDU = 10 gr alcohol

	Beer	Wine	Champagne	Spirit
1 SDU	250 - 210 ml * 5% - 6%	105 - 97 ml 12% - 13%	115 ml 11 %	32 ml 40 %
Usual measure	Can or “medium bottle” = 330ml	“Glass” 150 ml	“Glass” 140 ml	80ml “Shot” = 30 ml

* Half pint

J. Masip. Rev Clin Esp 2019 (in press)

SAFETY

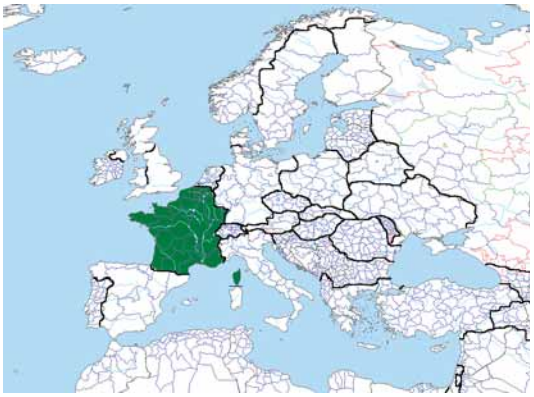
- Car accidents and other accidents, such as drowning
- Problems in relationships
- Poor performance at work or at school
- Higher likelihood of committing violent crimes or being a victim
- Legal, labor or economic problems
- Problems with the consumption of other substances
- Participation in risky sex or rape victim
- Increased risk of suicide

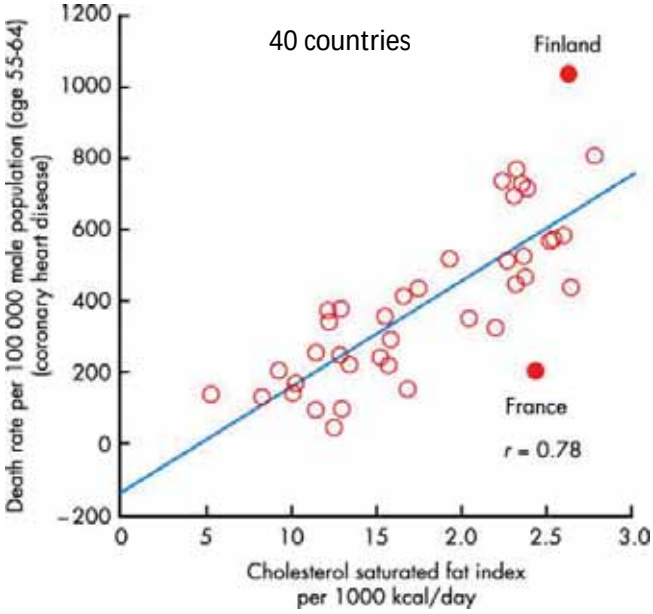
EFFECTS IN THE HEALTH

- **Liver disease**
- **Digestive disorders**
- **Heart disease**
- **Complications of diabetes**
- **Sexual disfunction and altered menstruation**
- **Vision disorders**
- **Congenital abnormalities**
- **Bone damage**
- **Neurological complications**
- **Immune deficiencies**
- **Increased risk of cancer**
- **Interactions between drugs and alcohol**

HARMFUL USE OF ALCOHOL

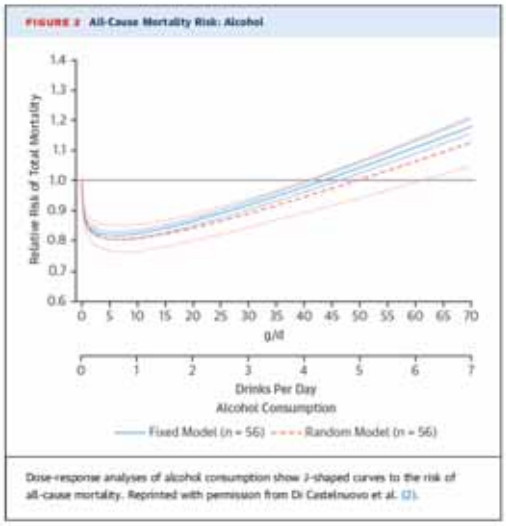
FRENCH PARADOX





Artaud-Wild. Circulation 1993

META-ANALYSIS
34 studies,
1.015.835 subjects and 94 533 deaths



Castelnuovo A, Ann Int Med 2006

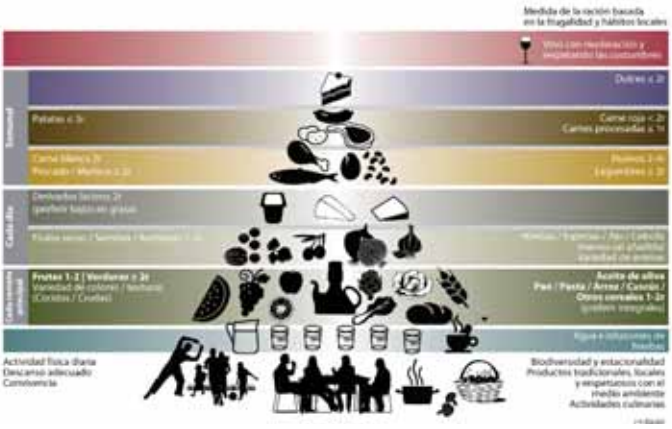
de Gaetano G, JACC 2017

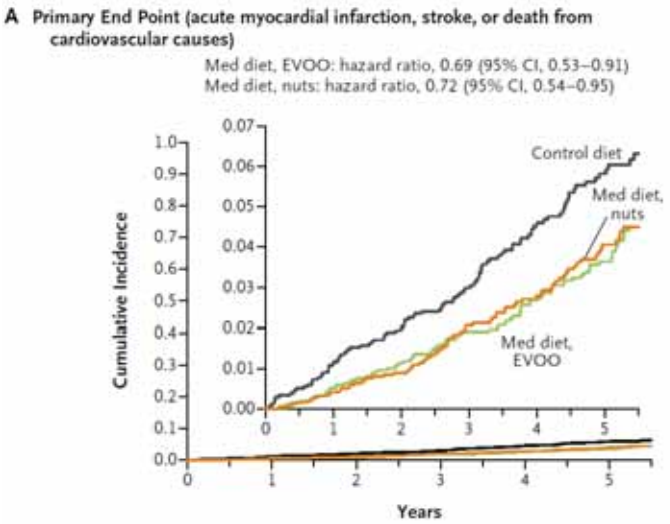
Un consumo moderado de alcohol es saludable

WHO Guidelines
1 standard drink (SD) = 10 g of pure ethanol,
Not exceeding 2 SD/day, with at least
2 nondrinking days during the week

Dietary Guidelines for Americans

The American Heart Association
Reduction in IHD
1-2 drinks/day for men
1 drink/day for women





No. at Risk						
Control diet	2450	2268	2020	1583	1268	946
Med diet, EVOO	2543	2486	2320	1987	1687	1310
Med diet, nuts	2454	2343	2093	1657	1389	1031

Estruch R. NEJM 2018

THE CONTRIBUTION TO THE ASSOCIATION OF ADHERENCE TO THE MEDITERRANEAN DIET SCORE WITH LOWER MORTALITY

Greek segment of the European Prospective Investigation into Cancer and nutrition (EPIC).

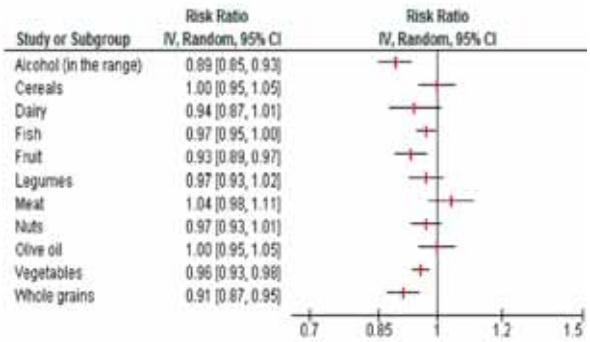
23.349 individuals

- Moderate (nor excessive or minimal) consumption ethanol (24%)
- Low consumption of meat and meat products (17%)
- High consumption of vegetables (16%)
- High consumption of fruits and nuts (10-11%)
- High monounsaturated to saturated lipid ratio (10-11%)
- High consumption of legumes (10-11%)
- High consumption of cereals (5%)
- Low consumption of dairy products (5%)
- High fish and seafood (0%)

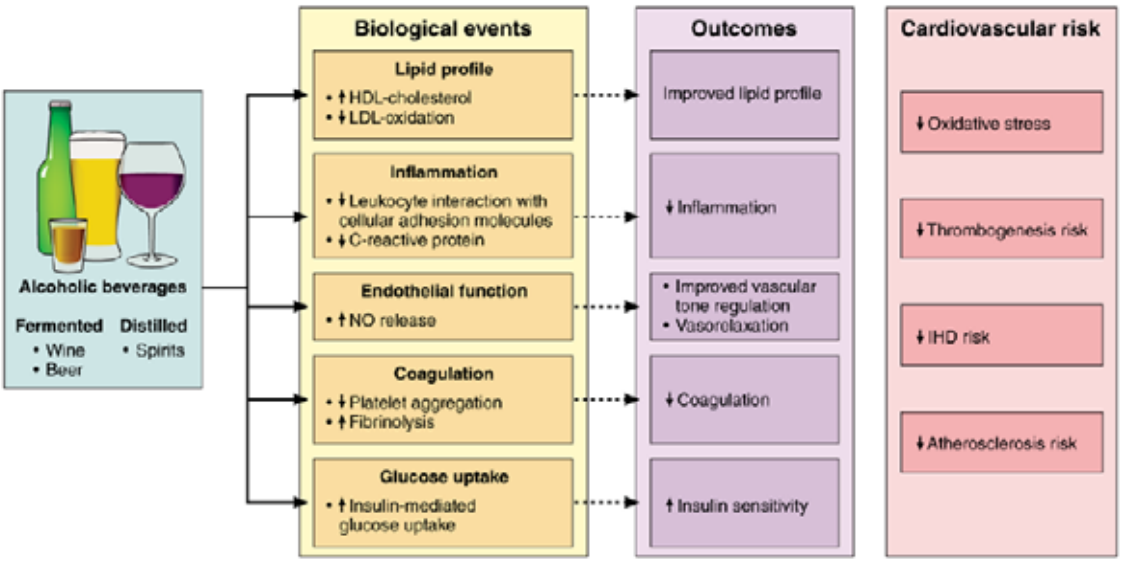
***Low: <10 g/day for men, <5 g/day for women**
Moderate: men ≥10 g/day and ≤50 g/day, women ≥5 g/day and ≤25 g/day
High: >50 g/day for men, >25 g/day for women

A. Trichopoulou- BMJ 2009

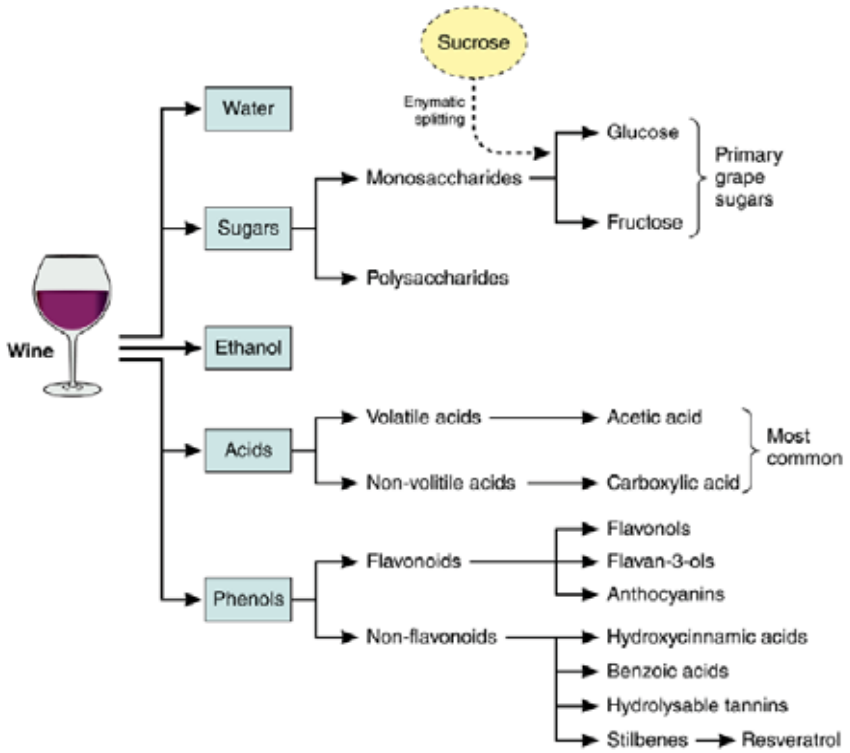
Individual components of Mediterranean Diet and cancer risk



Schwingshackl L, et al. Nutrients 2017



Haseeb S. Circulation 2017



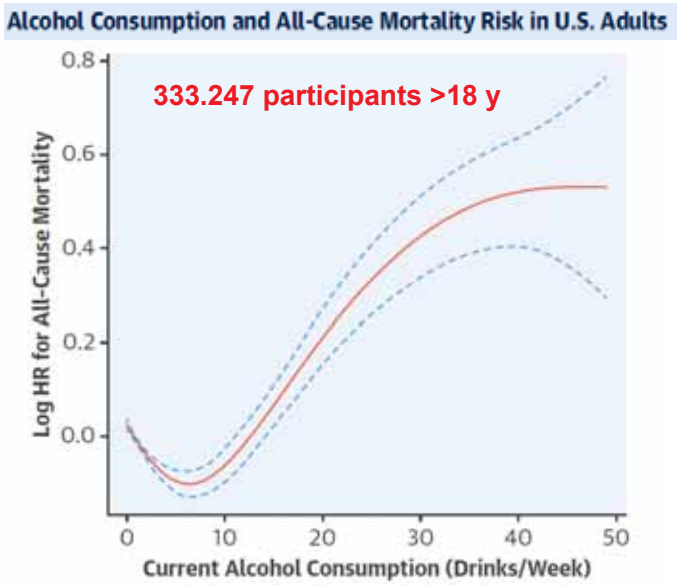
Haseeb S. Circulation 2017


ORIGINAL INVESTIGATIONS

Relationship of Alcohol Consumption to All-Cause, Cardiovascular, and Cancer-Related Mortality in U.S. Adults

Bo Xi, MD,[a] Sreenivas P. Veeranki, MD, DrPH,[b] Min Zhao, MD,[c] Chuanwei Ma, MS,[a] Yinkun Yan, MD,[d] Jie Mi, MD[e]

Linking 13 waves of the National Health Interview Surveys (1997 to 2009) to the National Death Index records through December 31, 2011.



Xi, B. et al. J Am Coll Cardiol. 2017;70(8):913-22.

¿EL CAMBIO DE PARADIGMA?

Global Health Metrics

Global, reg

Risk thresholds for alcohol consumption: combined analysis

GBD 2016 Risk Factors C

Summary

Background The G

comprehensive asse

long time series, thi

on the importance o

Angela M Wood, S

Michael Sweeting,

Shinichi Sato, Ing

Beverley Balkau, A

John Gallacher, Ag

Yvonne T van der

Conchi Moreno-Iri

Dan G Blazer II, Al

Paul J Nietert, Bru

José M Huerta, Ja

Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016

GBD 2016 Alcohol Collaborators*

World Health Organization

Global Health Metrics

Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016

GBD 2016 Risk Factors Collaborators*

Summary

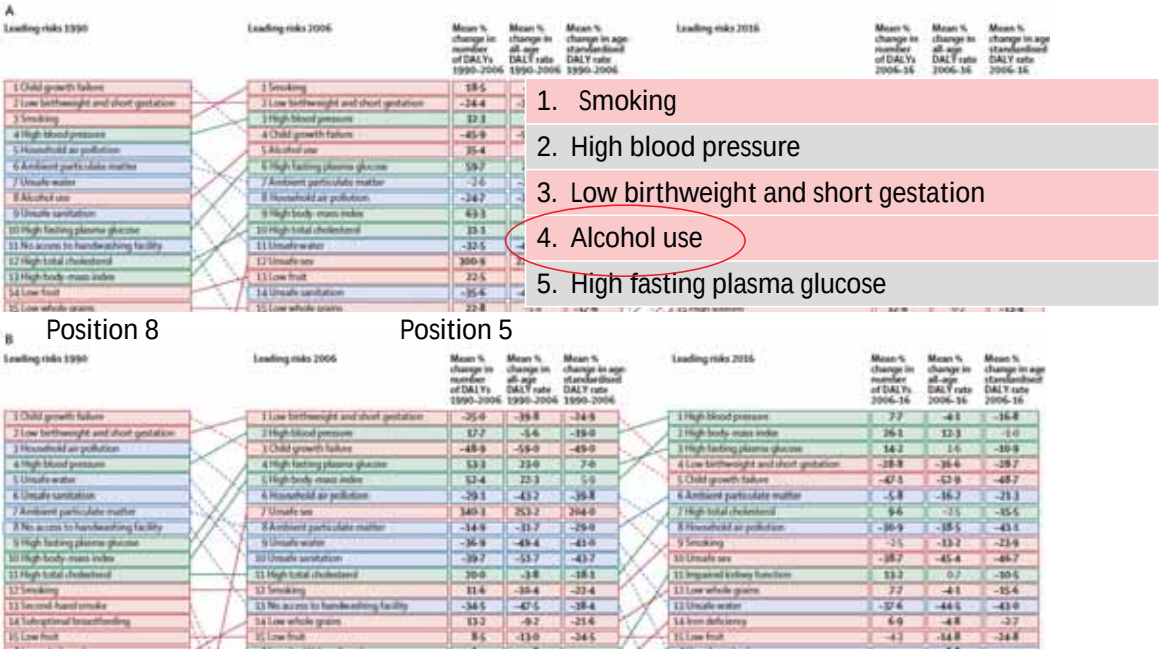
Background The Global Burden of Diseases, Injuries, and Risk Factors Study 2016 (GBD 2016) provides a comprehensive assessment of risk factor exposure and attributable burden of disease. By providing estimates over a long time series, this study can monitor risk exposure trends critical to health surveillance and inform policy debates on the importance of addressing risks in context.

Lancet 2017; 390: 1345–422

*Collaborators listed at the end of the Article

This online publication has been

GBD: 1990 Harvard and WHO with IHME.
2010 Bill Gates Foundation expanded 3.600 researchers, 146 countries, 359 diseases and injuries



Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016

GBD 2016 Alcohol Collaborators* Global Burden of Diseases, Injuries, and Risk Factors Study

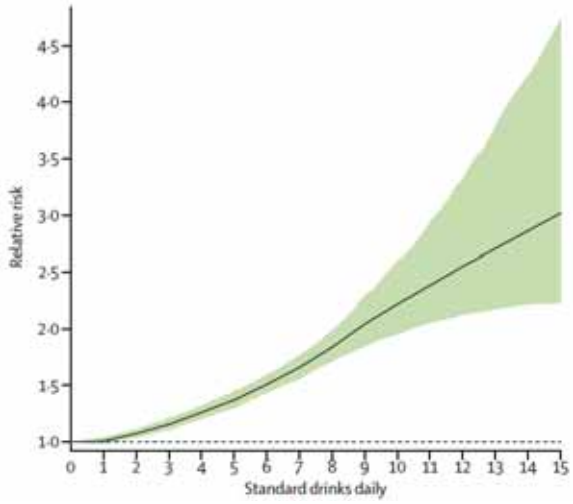
www.thelancet.com Published online August 23, 2018 http://dx.doi.org/10.1016/S0140-6736(18)31310-2

alcohol-attributable deaths and disability-adjusted life-years (DALYs) for 195 locations from 1990 to 2016, for both sexes and for 5-year age groups between the ages of 5 years and 95 years and older

694 data sources of individual and population-level alcohol consumption, along with 592 prospective and retrospective studies on the risk of alcohol use

standard drinks daily, defined as 10 g of pure ethyl alcohol)

Global Burden of Disease (GBD)



Weighted relative risk of alcohol for all attributable causes,
by standard drinks consumed per day

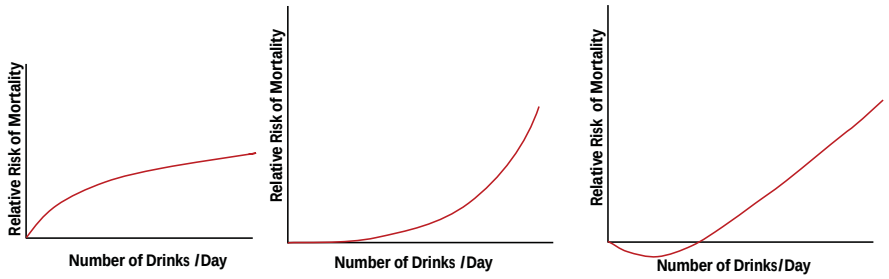
GBD. Lancet 2018

El único consumo seguro de alcohol es 0

Ya no puede hablarse de ningún beneficio del consumo de alcohol

Los estudios que han encontrado un beneficio con el consumo moderado tenían el sesgo de los ex bebedores

IMPACT OF ALCOHOL CONSUMPTION ON DIFFERENT DISEASES

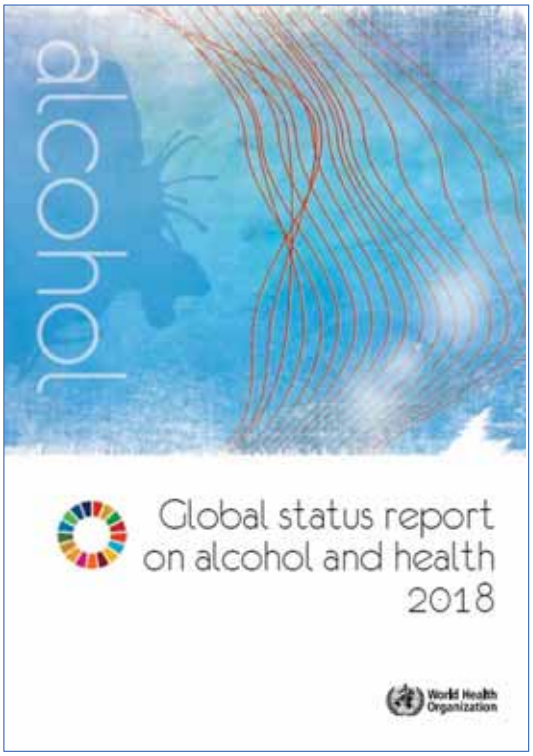


Increases the risk at any doses	Low doses have a neutral effect	Low doses reduce the risk
Atrial fibrillation	Cirrhosis and liver diseases (5-6)	Diabetes mellitus (4-5)
Breast cancer	Hypertensive heart disease (1)	Ischemic heart diseases (5)
Colon and rectal cancer	Lower respiratory infections (2.5)	Ischemic stroke (2-3.5)
Epilepsy	Pancreatitis (5-6)	
Esophagical cancer		
Hemorragic stroke		
Interpersonal violencel		
Laryngeal, lip and buccal cancer		
Hepatic cancer		
Pharynx and nasopharynx cancer		
Injuries*		
Tuberculosis		

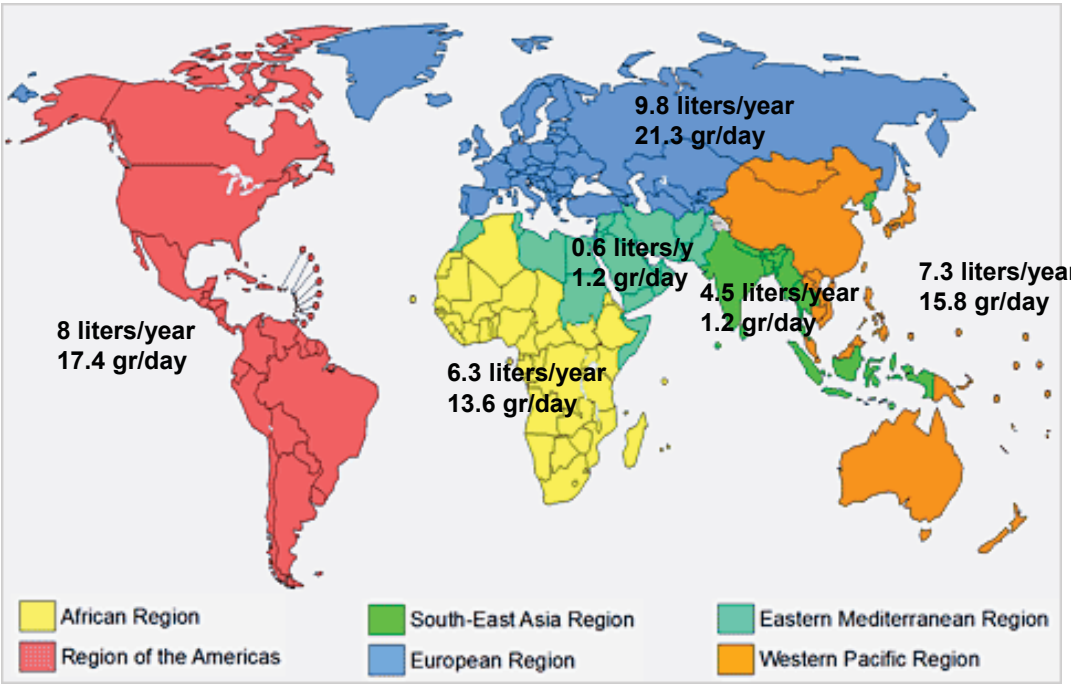
Global Burden of Disease (GBD)

El consumo moderado de alcohol reduce el riesgo de infarto cerebral y de miocardio y la diabetes

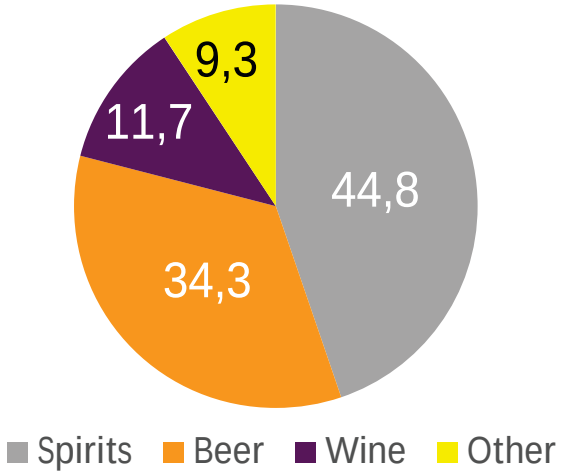
J. Masip. Rev Clin Esp 2019



LEVELS OF ALCOHOL CONSUMPTION (>15yo) APC : 6.4 liters ; 13.9 gr/day

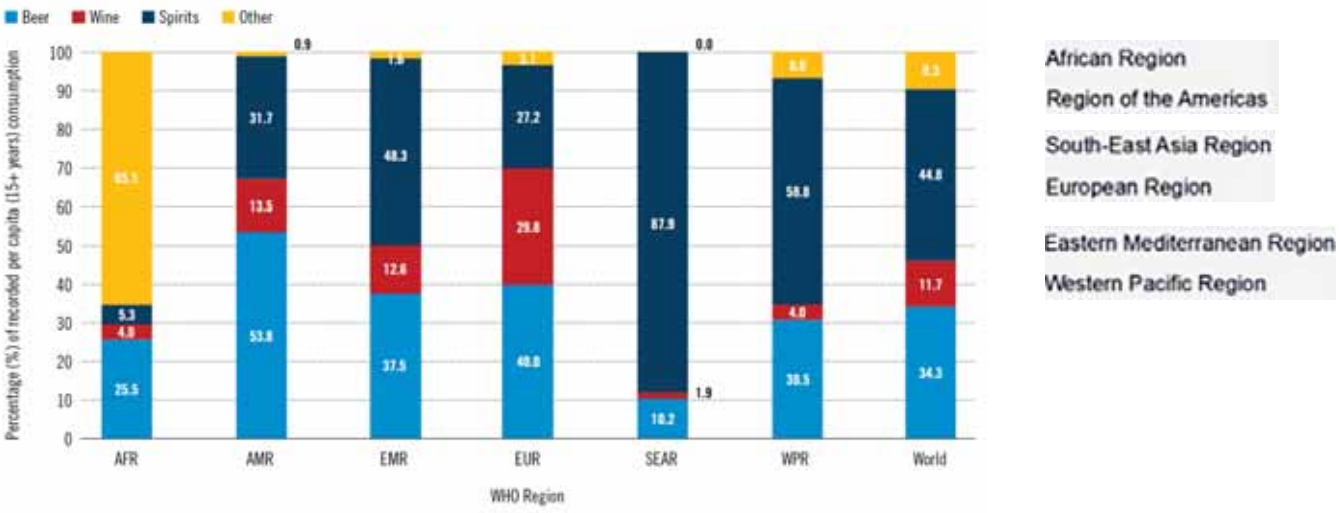


Proportion of Consumption



WHO Report 2018

Figure 3.7 Percentage (in %) of recorded alcohol per capita consumption (APC) (15+ years) in the form of beer, wine, spirits and other types of alcoholic beverages by WHO region and the world, 2016



Other: e.g. fortified wines, rice wine or other fermented beverages made of sorghum, millet or maize

Los resultados del GBD englobando los 5 continentes recogen datos de hábitos y tipos de bebida alcohólica muy diferentes según la localización geográfica, en la que los licores/espirituosos son los predominantes

Los estudios centrados en los países occidentales con mayor cultura de vino y cerveza e incorporado a las comidas han sido distintos, especialmente los asociados a la dieta mediterránea

Am J Preventive Med 2005

Brief Reports

Cardiovascular Risk Factors and Confounders Among Nondrinking and Moderate-Drinking U.S. Adults

Timothy S. Naimi, MD, MPH, David W. Brown, MSPH, MS, Robert D. Brewer, MD, MSPH, Wayne H. Giles, MD, MS, George Mensah, MD, Mary K. Serdula, MD, MPH, Ali H. Mokdad, PhD, Daniel W. Hungerford, DrPH, James Lando, MD, MPH, Shapur Naimi, MD, Donna F. Stroup, PhD, MSc

27 de 30 factores CV (90%) eran peores en no bebedores

Características de los no bebedores

Characteristics	Never drinkers	Current drinkers	P
N	21 710	333 259	
Women n (%)	15 542 (71.6)	163 662 (49.1)	<0.0001
Age (years)	56.8 ± 8.6	56.5 ± 8.0	<0.0001
Body mass index (kg/m^2)	28.1 ± 5.6	27.0 ± 4.4	<0.0001
Systolic blood pressure (mmHg)	139.1 ± 20.4	140.4 ± 19.6	<0.0001
Diastolic blood pressure (mmHg)	81.4 ± 10.8	82.6 ± 10.7	<0.0001
Physical Activity (MET-minutes/week)	914 (99–6929)	1064 (148–6132)	<0.0001
Current smoking n (%)	1402 (6.5)	34 289 (10.3)	<0.0001
Townsend deprivation index	−0.17 ± 3.49	−1.61 ± 2.91	<0.0001
Diabetes n (%)	2239 (10.3)	12 973 (3.9)	<0.0001
Overall events n (%)	881 (4.1)	11 512 (3.5)	<0.0001
Ischemic heart disease n (%)	256 (1.2)	3384 (1.0)	0.020
Cerebrovascular disease n (%)	101 (0.47)	1154 (0.35)	0.004

UK Biobank

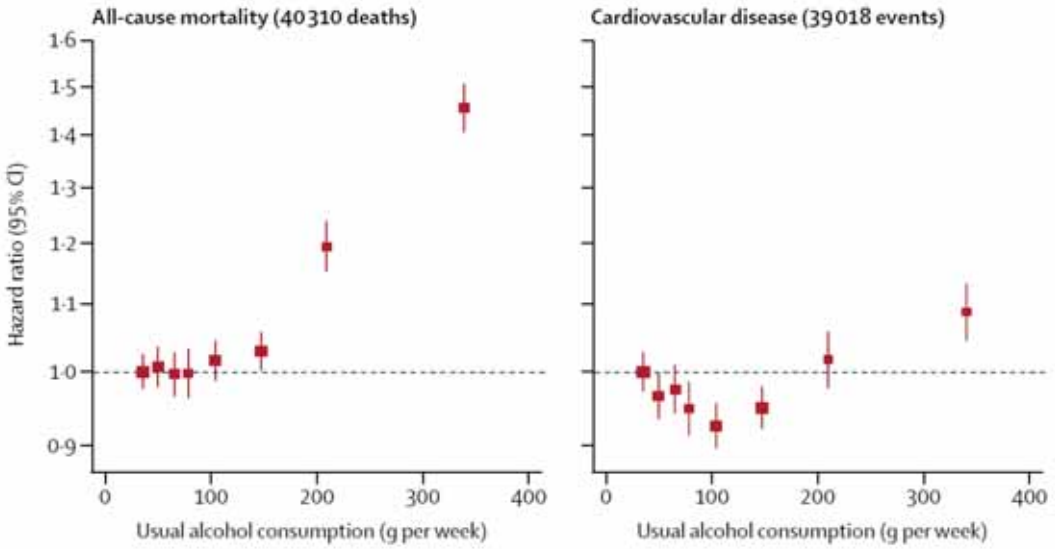
R. Schutte. Clinical Nutrition 2022

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

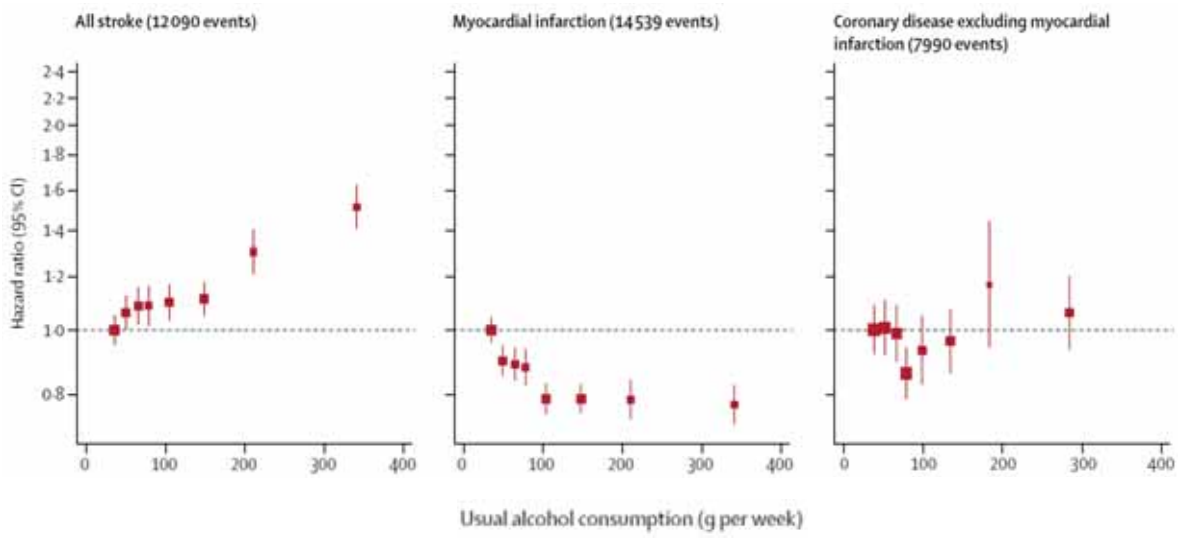
Angela M Wood, Stephen Kaptoge, Adam S Butterworth, Peter Willeit, Samantha Warnakula, Thomas Bolton, Ellie Paige, Dirk S Paul, Michael Sweeting, Stephen Burgess, Steven Bell, William Astle, David Stevens, Albert Koulman, Randi M Selmer, W M Monique Verschuren, Shinichi Sato, Inger Njølstad, Mark Woodward, 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,

Lancet April 2018

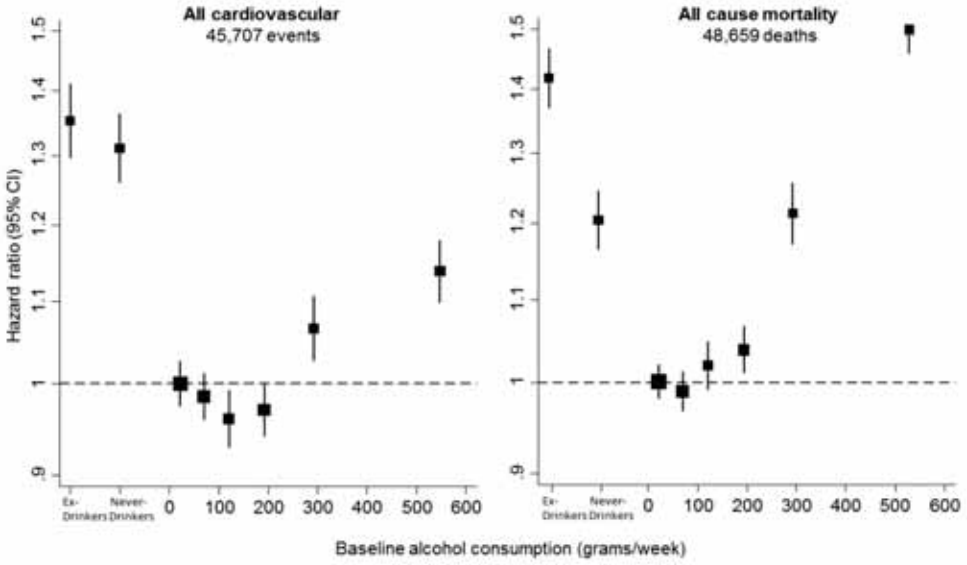
Bebedores de alcohol



Wood A. Lancet April 2018

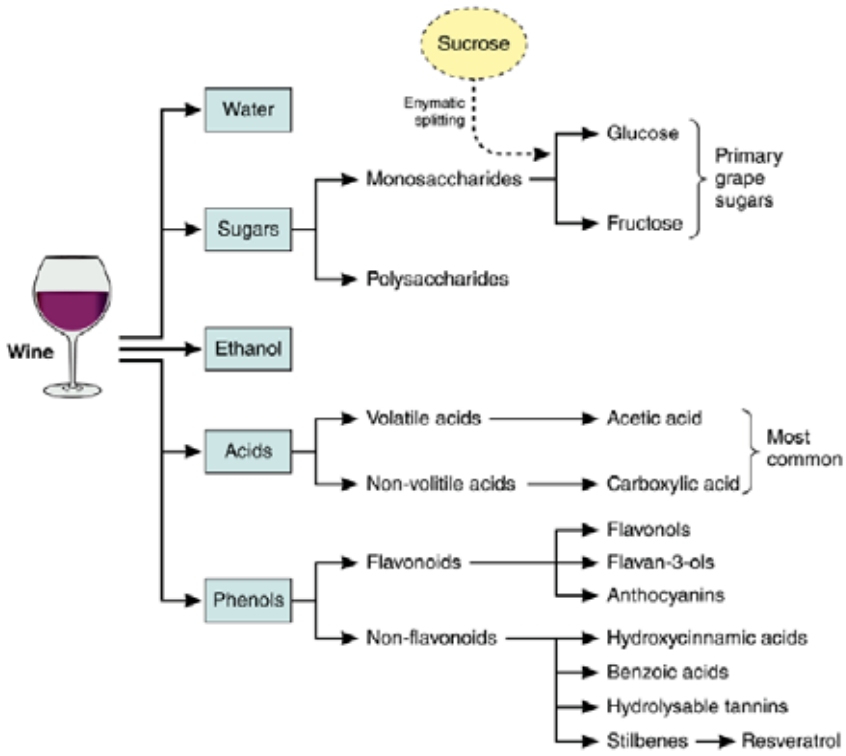


Wood A. Lancet April 2018



Wood A. Lancet April 2018. Supplement

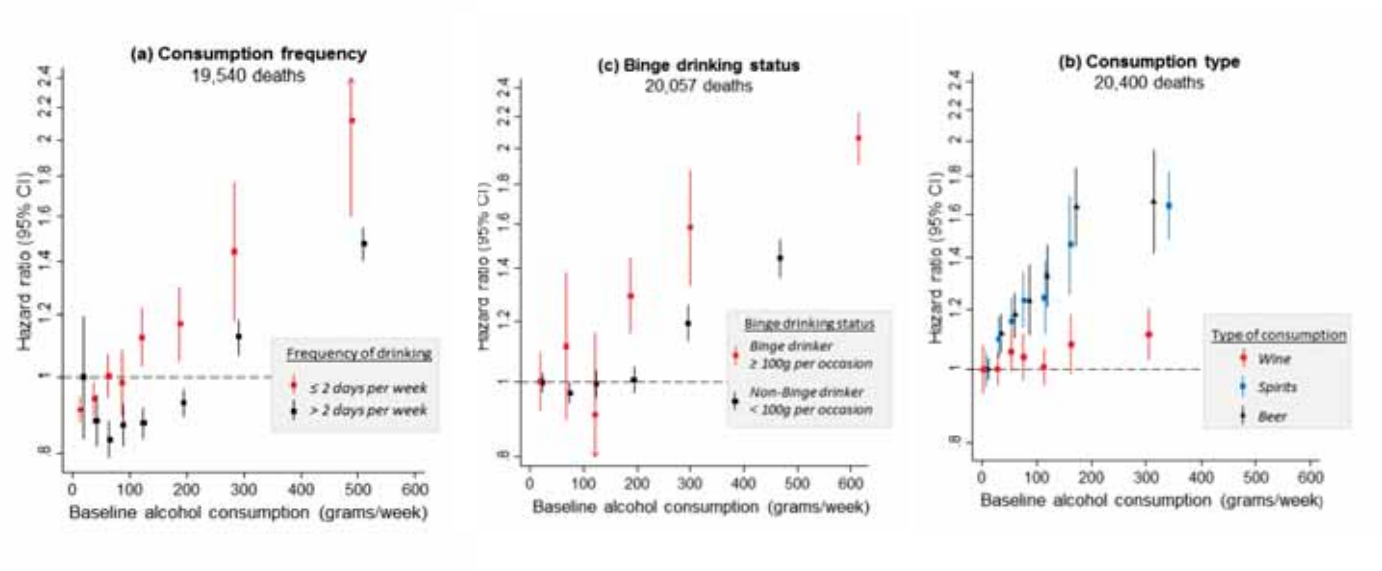
Ministerio Sanidad y Consumo 2020



En relación a la salud, es el vino distinto a las otras bebidas alcohólicas?

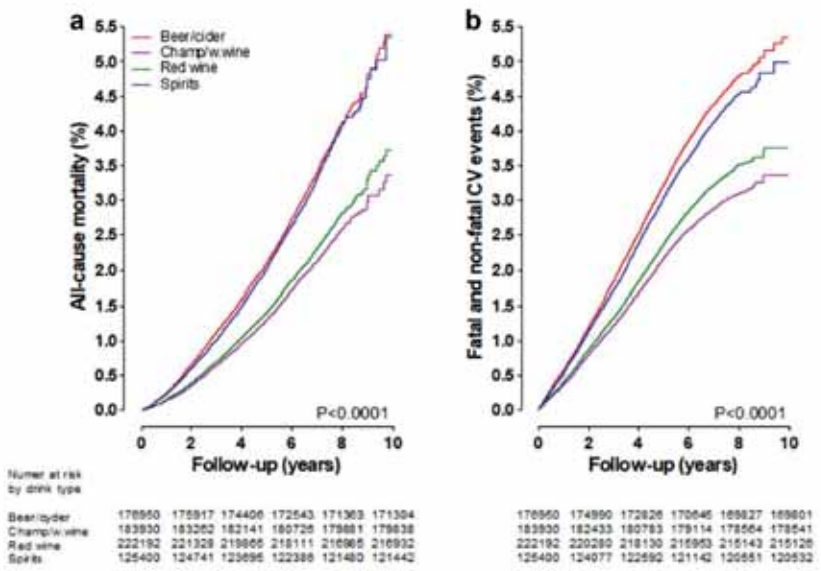
Haseeb S. Circulation 2017

Impacto de los distintos tipos de consumo

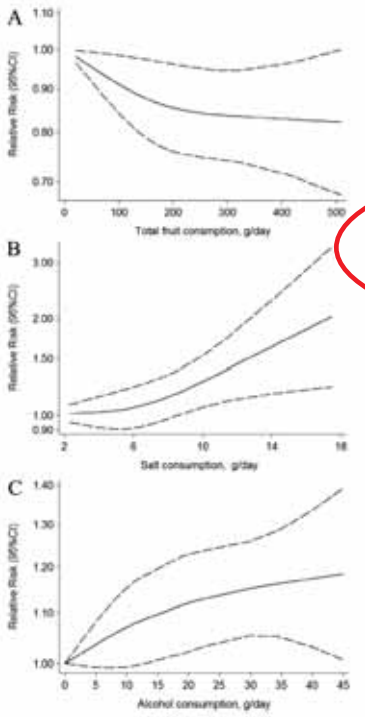


Wood A. Lancet April 2018. Supplement

UK Biobank N= 446.439



Shutte R. Clinical Nutrition 2020



6.316.385 individuals included with 32,758 **GASTRIC CANCER** cases

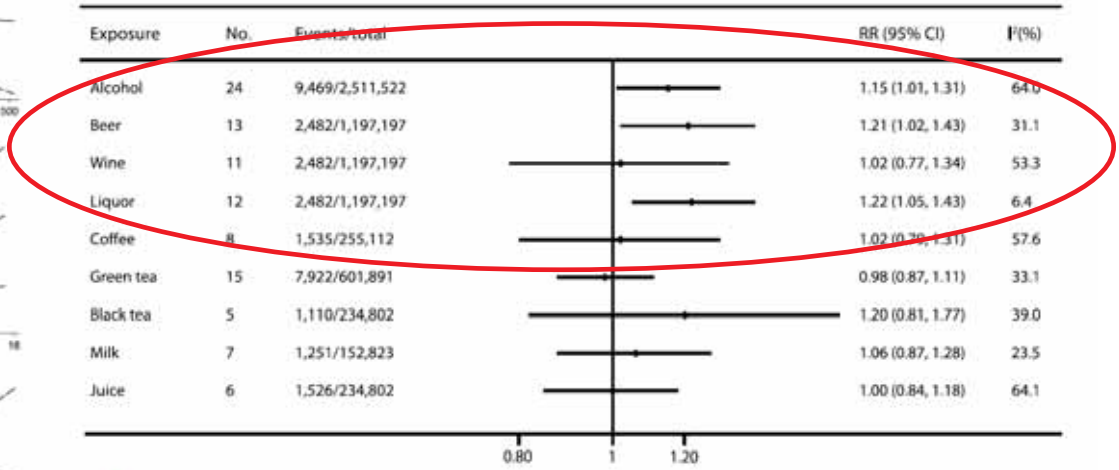


Fig. 4. Forest plot of associations between alcohol, coffee, tea, and other beverage consumption and gastric cancer risk.

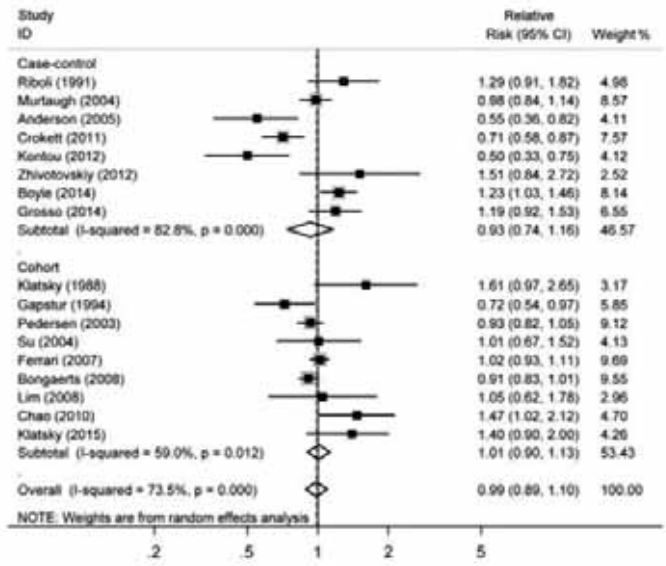
X. Fang. European Journal of Cancer 2015

Wine consumption and colorectal cancer risk: a meta-analysis of observational studies

Weisong Xu[a], Hui Fan[a], Zhijuan Han[a], Yufeng Liu[a], Yiping Wang[a] and Zhenming Ge[b]

European Journal of Cancer Prevention 2019

This meta-analysis suggests that any wine consumption was not associated with the risk of CRC. Null associations were shown in men and women for colon and rectal cancer



Meta-analysis of wine consumption and the risk of colorectal cancer for any drinkers versus nondrinkers. CI, confidence interval.

26 studies (8 case–control and 18 cohort studies) involving 21.149 cases of BREAST CANCER

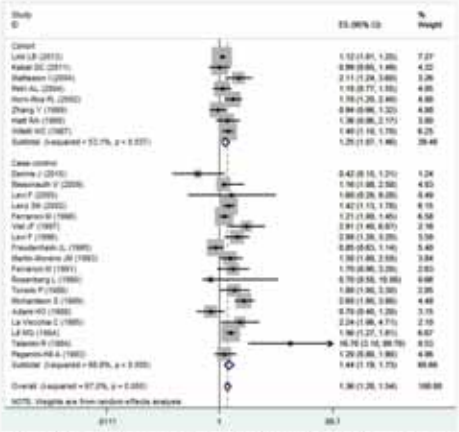


Figure 2. Estimates (95% CIs) of Wine Drinking (Highest Versus Lowest Category) and Breast Cancer Risk

Alcohol increased the risk of breast cancer (RR 1.36 (95% CI: 1.20-1.54, *P*<0.001) in cohort and case-control studies

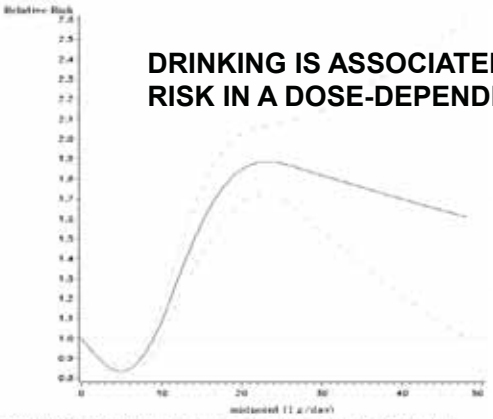


Figure 3. Ethanol Intake Effect on Breast Cancer

DRINKING IS ASSOCIATED WITH BREAST CANCER RISK IN A DOSE-DEPENDENT MANNER.

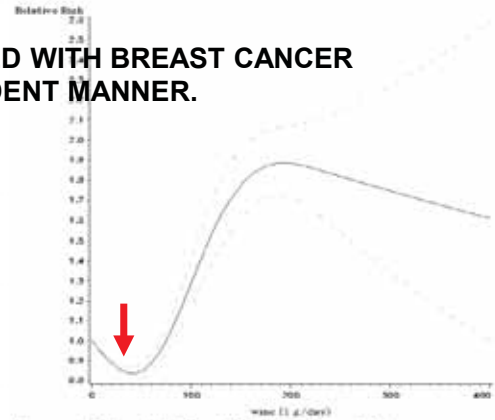
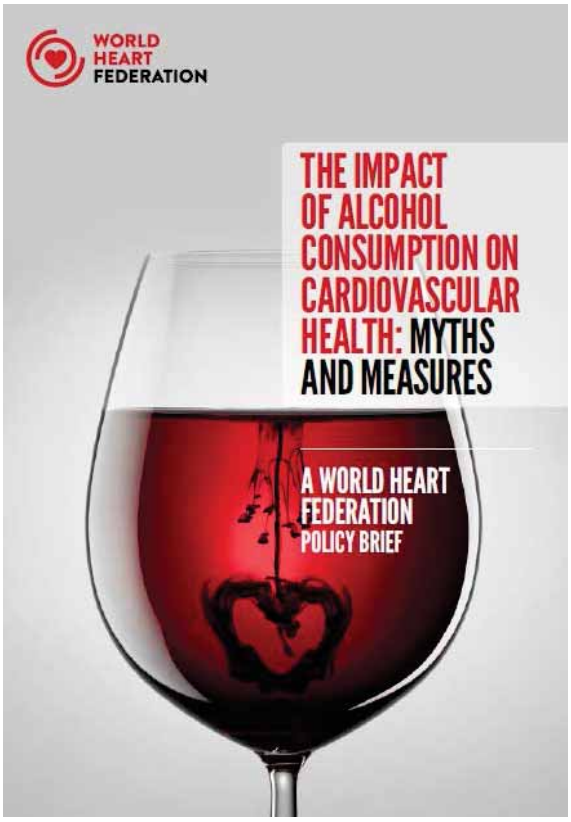


Figure 4. Wine Intake Effect on Breast Cancer

Low doses of alcohol from wine (<5gr/day) had a protective effect

Jia-Yan Chen. Asian Pac J Cancer Prev, 2016

¿Cuales son las amenazas?



RECOMMENDATIONS FOR ADVOCACY

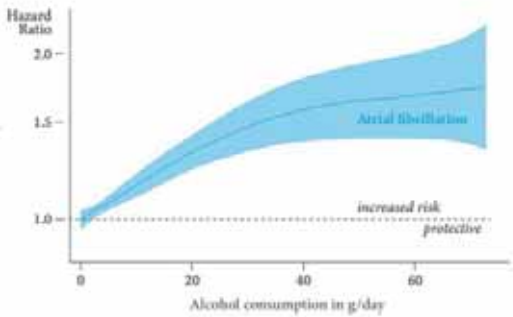
To begin with, all such actors should uniformly indicate the evidence on alcohol consumption and heart health. Ministries should implement strict regulatory measures to dissuade direct and indirect impacts of alcohol use (**see Table 2**). Finally, national cardiology societies and foundations can play the following roles for ensuring reduction in alcohol use and its related harms:

- Advocate for the adoption of WHO's SAFER Guidelines in their local context[31]
- Call for strict regulation of alcohol products
- Advocate for minimum pricing of alcohol products
- Build capacity internally and among peers to promote cessation of alcohol use and **reduce consumption among current users**
- Promote community, national, and global best practices and materials, such as the PAHO "Live better, drink less" campaign, and advocate for their uptake[32]
- Communicate evidence on the harms of alcohol use, including that alcohol consumption increases the risk of many CVD
- Prioritise alcohol control in national agendas for health and support policy coherence between health and other sectors
- Facilitate screening for the use of alcohol and other substances as a part of risk mitigation during the health assessment of individuals visiting a health care centre
- Set the example of non-collaboration with the alcohol industry and/or its public relations groups.

ESC European Society of Cardiology
European Heart Journal (2021) 00, 1–8
doi:10.1093/eurheartj/ehaa953
CLINICAL RESEARCH
Epidemiology

Alcohol consumption, cardiac biomarkers, and risk of atrial fibrillation and adverse outcomes

Dora Csengeri[1], Ngoc-Anh Sprünker[1], Augusto Di Castelnuovo[2], Teemu Niiranen[3,4], Julie Kk. Vishram-Nielsen[5,6], Simona Costanzo[7], Stefan Söderberg[8], Steen M. Jensen[8], Erkki Vartiainen[4], Maria Benedetta Donati[7], Christina Magnussen[1,9], Stephan Camen[1,9], Francesco Gianfagna[2,10], Maja-Lisa Løchen[11], Frank Kee[12], Jukka Kontto[4], Ellisiv B. Mathiesen[13],



Conclusions **In contrast to other cardiovascular diseases such as HF, even modest habitual alcohol intake of 1.2 drinks/day was associated with an increased risk of AF, which needs to be considered in AF prevention.**

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JOURNAL OF CLINICAL ONCOLOGY

ASCO SPECIAL ARTICLE

Alcohol and Cancer: A Statement of the American Society of Clinical Oncology

Noelle K. LeConte, Abenaa M. Brewster, Judith S. Kaur, Janette K. Merrill, and Anthony J. Alberg

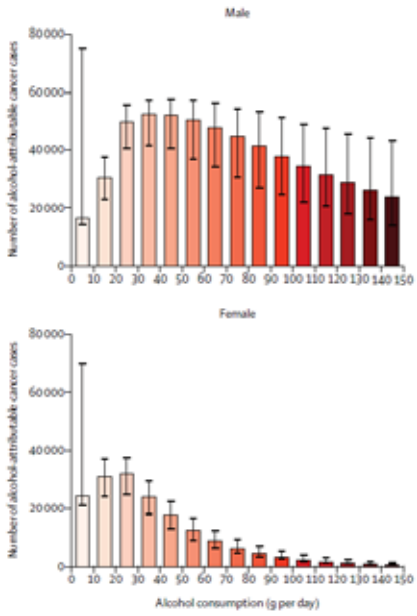
Table 1. Summary of Relative Risks From a Meta-Analysis for the Association Between Amount of Alcohol Drinking and Risk of Cancer

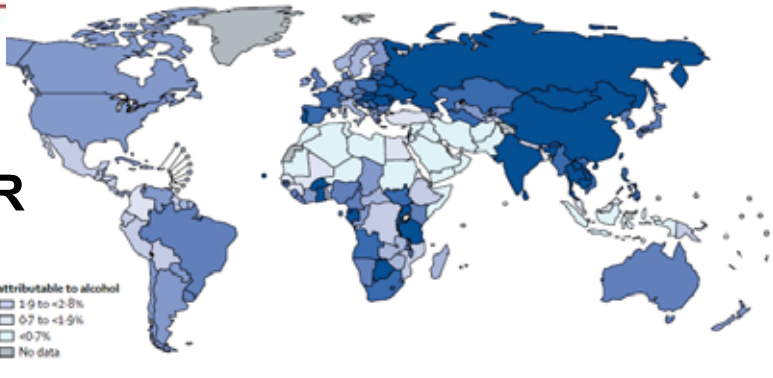
Type of Cancer	Relative Risk (95% CI)			
	Nondrinker	Light Drinker	Moderate Drinker	Heavy Drinker
Oral cavity and pharynx	1.0 (referent)	1.13 (1.0 to 1.26)	1.83 (1.62 to 2.07)	5.13 (4.31 to 6.10)
Esophageal squamous cell carcinoma	1.0 (referent)	1.26 (1.06 to 1.50)	2.23 (1.87 to 2.65)	4.95 (3.86 to 6.34)
Larynx	1.0 (referent)	0.87 (0.68 to 1.11)	1.44 (1.25 to 1.66)	2.65 (2.19 to 3.19)
Liver	1.0 (referent)	1.00 (0.85 to 1.18)	1.08 (0.97 to 1.20)	2.07 (1.66 to 2.58)
Female breast	1.0 (referent)	1.04 (1.01 to 1.07)	1.23 (1.19 to 1.28)	1.61 (1.33 to 1.94)
Colorectum	1.0 (referent)	0.99 (0.95 to 1.04)	1.17 (1.11 to 1.24)	1.44 (1.25 to 1.65)

Global burden of cancer in 2020 attributable to alcohol consumption: a population-based study

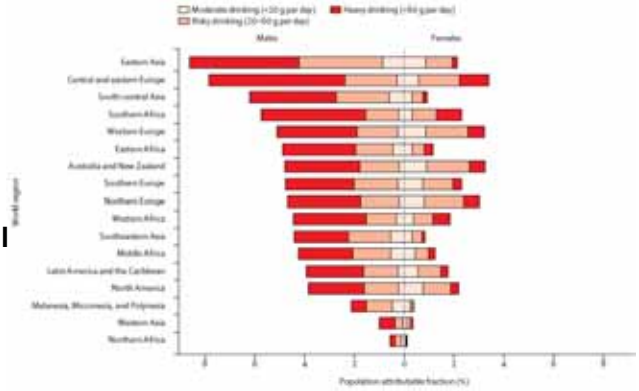
Rumgay H. Lancet 2021

CANCER





741.300 or 4·1% of all new cases of cancer in 2020 were attributable to alcohol consumption.



Plan de acción europeo para reducir el uso nocivo del alcohol 2012-2020

World Health Organization
REGIONAL OFFICE FOR Europe

Regional Committee for Europe
Sixty-first session

EUR/RC61/13
+ EUR/RC61/Conf.Doc./6

Baku, Azerbaijan, 12–15 September 2011

15 June 2011
111372
ORIGINAL: ENGLISH

Provisional agenda item 6(d)

European action plan to reduce the harmful use of alcohol 2012–2020

This document contains the action plan for implementation of the European and global alcohol strategies. It has been developed through a consultative process with a core editorial board and a larger editorial group; a first consultation with Member States took place in Geneva, Switzerland on 9–10 February 2010 and a second consultation took place during a meeting with Member States in Zurich, Switzerland on 4–5 May 2011.

The action plan is submitted to the Regional Committee for discussion and potential endorsement. To that end, a draft resolution is attached for the Committee's consideration.

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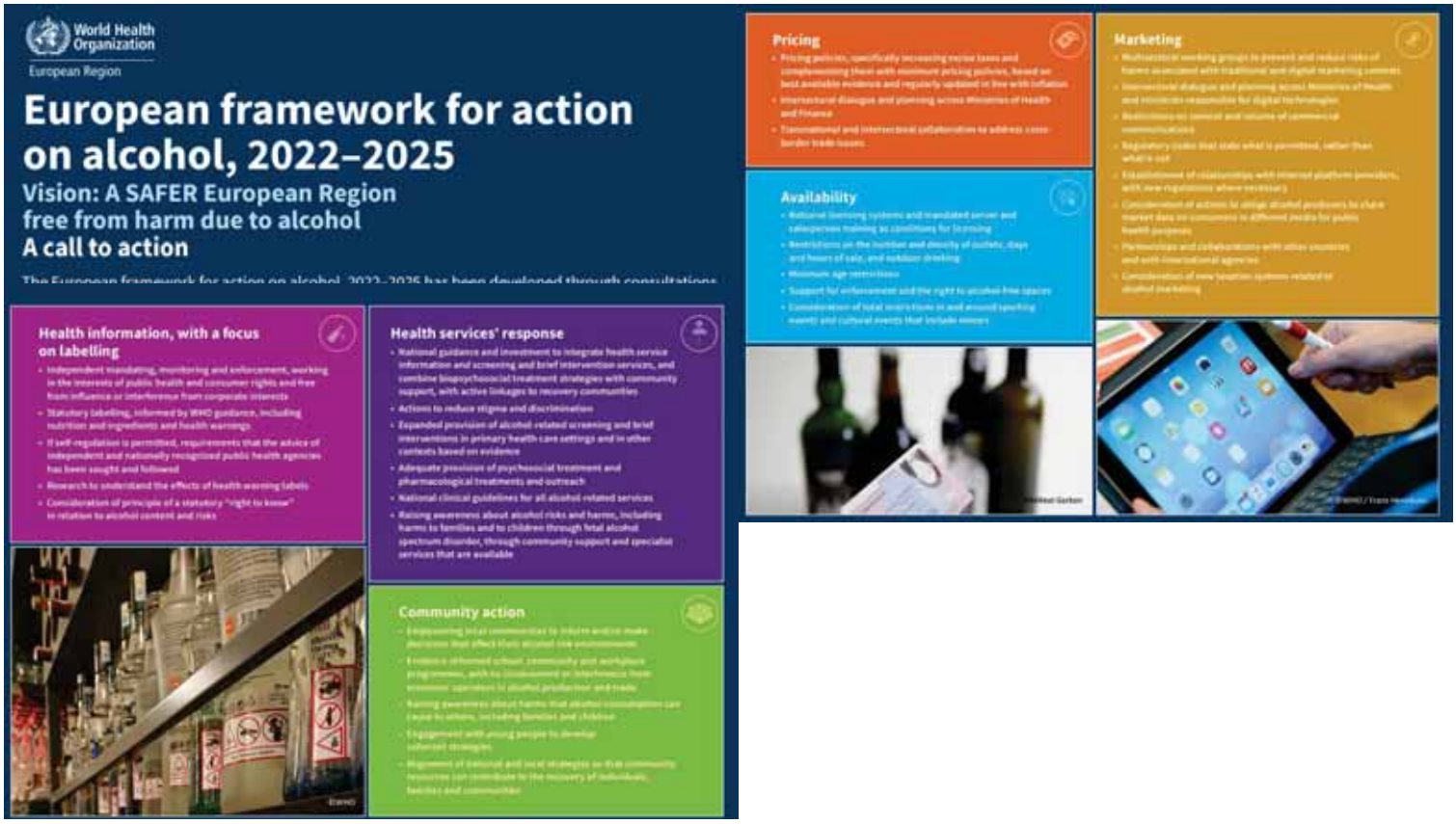
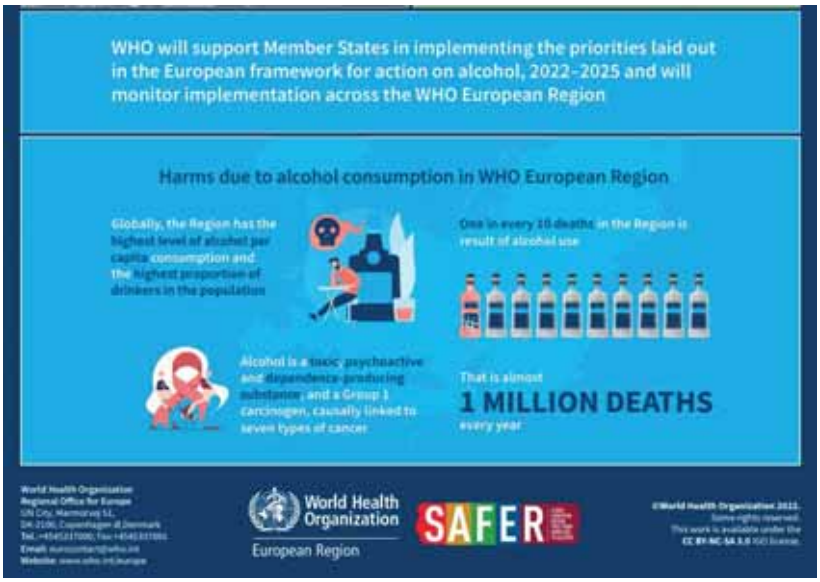
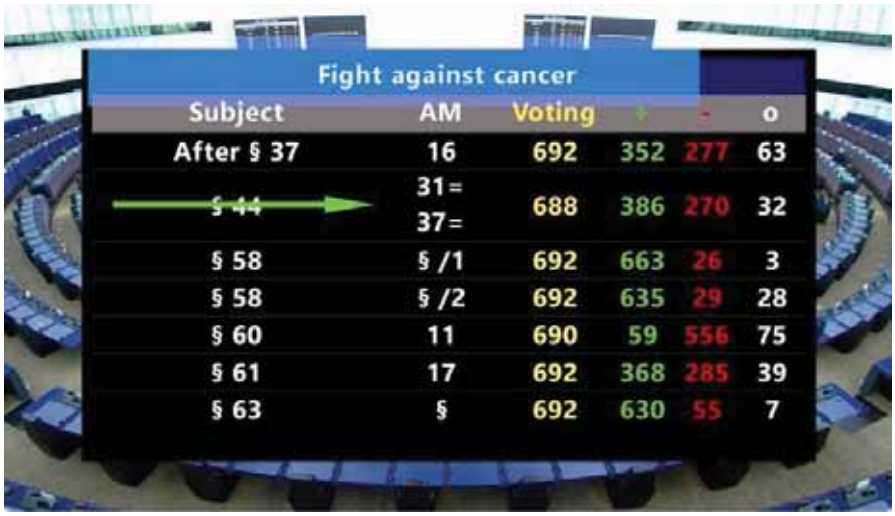
FIVIN
FUNDACIÓN PARA LA INVESTIGACIÓN DEL VINO Y LA NUTRICIÓN

WINEinMODERATION.com
Art de Vivre
EL VINO SÓLO SE DISFRUTA CON MODERACIÓN





La Unión Europea descarta advertir que "cualquier consumo" de alcohol supone un riesgo de cáncer
Las enmiendas cambian "no existe un nivel de consumo seguro" por "el nivel más seguro de consumo es ninguno". No se especifica cuánta cantidad se considera "nociva" y ampara el consumo moderado.
Los eurodiputados eluden incluir advertencias sanitarias en el etiquetado de bebidas alcohólicas y optan por pedir que se incluya "información sobre el consumo moderado y responsable". Las marcas podrán continuar patrocinando eventos deportivos en la Unión Europea.



CONCLUSIONES EN RELACIÓN AL ALCOHOL Y LA SALUD

El consumo excesivo de alcohol es uno de las principales factores de riesgo de muerte y discapacidad en el mundo

Los efectos saludables de un consumo moderado podrían haber estado sesgados por un mayor riesgo del grupo de no bebedores, aunque hay otros factores como el nivel socio-económico, la forma del consumo, la dieta y el estilo de vida, que también podrían haber influido favorablemente en el grupo de consumo moderado.

Muchos estudios han reportado que el consumo moderado de alcohol, mayormente de vino, reducen el riesgo de cardiopatía isquémica, principalmente de infarto de miocardio.

Estudios epidemiológicos recientes han encontrado que el consumo de alcohol, incluso de forma moderada, puede aumentar el riesgo de hipertensión arterial, fibrilación auricular y cáncer (especialmente digestivo y de mama), por lo cual diversas instituciones están promoviendo la abstinencia. El consumo tipo atracón es nocivo.

Por ello, el mensaje de los últimos 30 años de que el alcohol prolonga la vida, es difícil de sostener puesto que los beneficios observados a nivel CV con consumos bajos, podrían quedar contrarrestados por un mayor riesgo de cáncer

Conclusiones en relación al alcohol y salud (2)

El impacto del alcohol en la salud es diferente en los países desarrollados, con alto nivel de vida, con un consumo más regular y vinculado a las comidas y especialmente a la dieta mediterránea, que probablemente configura un perfil de consumo más seguro.

Los niveles de bajo riesgo propuestos por numerosas instituciones y entidades públicas como <2 units/day en UK o <20 gr/día en España, o < 100 gr/week, permiten un margen de consumo que conserva los beneficios de socialización y degustación.

Es muy difícil científicamente establecer conclusiones sólidas pues los datos disponibles se basan en estudios observacionales de cohortes, que recogen patrones de consumo muy variables y autoreportados. Además, en el seguimiento es muy complicado que se mantengan patrones constantes y consumos exclusivos durante años.

Existen datos que sugieren que los riesgos son menores con el consumo de vino, pero no son lo suficientemente sólidos como para que las instituciones les den un trato diferenciado respecto al resto de bebidas alcohólicas. Solo con estudios aleatorios amplios bien realizados que lo demostrasen podría sostenerse esta diferenciación.

GRACIAS POR SU ATENCIÓN