Alcohol’s contribution to obesity

Ana Sarasa Renedo
Why working on these health determinants?

- Dietary risks
- Alcohol & drug use
- Tobacco
- Low physical activity
- Unsafe sex
- Sexual abuse & violence

DALYs per 100,000

GBD 2016

HIV/AIDS & tuberculosis
Diarrhea/LRI/other
NTDs & malaria
Maternal disorders
Neonatal disorders
Nutritional deficiencies
Other group 1
Neoplasms
Cardiovascular diseases
Chronic respiratory
Cirrhosis
Digestive diseases
Neurological disorders
Mental & substance use
Diabetes/urog/blood/endo
Musculoskeletal disorders
Other non-communicable
Transport injuries
Unintentional inj
Self-harm & violence
War & disaster
Alcohol consumption and health

Drinking alcohol is associated with a risk of developing such health problems as alcohol dependence, liver cirrhosis, cancers and injuries (WHO, 2014).

The highest numbers of deaths due to alcohol consumption are from cardiovascular diseases, … OECD, 2015.

Drinking more alcohol than in moderation increases the risk of obesity. AHA, 2015.

Alcohol can interfere with foetal development and cause a range of disorders on a continuum of severity, known as foetal alcohol spectrum disorders (FASD). WHO, 2016.

‘Alcohol suppresses both the innate and the adaptive immune systems’ NIH-NIAAA, 2015.


... excessive alcohol consumption contributes to obesity, alcoholism, suicide and accidents.' AHA, 2016.
Adult obesity & overweight in Europe

Alcohol has a high energy content, each gram of alcohol contains ~7 Kcal (EFSA)

1 gram of fat = 9 Kcal
1 gram sugar = 4 Kcal

Based on Eurostat, EHIS 2014
Average daily caloric intake from alcohol

Per capita (+15)

Per capita exc. abstainers (+15)

Based on per capita estimates WHO 2008-2010
Energy contribution (Kcal) from alcoholic drinks and soft drinks

Based on 2015 sales data from Euromonitor International, Passport: Nutrition 2017
Caloric content

A 250ml glass of wine contains roughly the same amount of calories as a 44g bar of chocolate (228 calories) (EUROCARE)

↑Wine vs Chocolat
n=674

Beer vs ↑Pizza
n=680

Based on TNS 2014*
## Low-risk consumption guidance in the EU (adapted from JÁ RARHA)

<table>
<thead>
<tr>
<th>Type of guidance</th>
<th># countries</th>
<th>Countries</th>
<th>Guidance (range/summary)</th>
<th>Include alcohol free days or spreading over 3 or more days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of drinks</td>
<td>6 (5 EU MS)</td>
<td>BG, CY*, LU, NL*, SI, CH</td>
<td>4 define 'a drink' as (10-12g pure alcohol). Men: 1-3 per day. Women: 1-2 per day.</td>
<td>LU, CH</td>
</tr>
<tr>
<td>Standard units alcohol</td>
<td>7 EU MS</td>
<td>DK, IE, FR, IT, MT, FI, SE</td>
<td>Men: 1-2 standard units per day or 10-21 per week. Women: 1 standard unit per day or 7-14 per week</td>
<td>DK, IE, FR, MT, UK</td>
</tr>
<tr>
<td>Grams alcohol</td>
<td>13 (12 EU MS)</td>
<td>BG*, CZ, DE, EE*, EL*, ES, HR*, HU*, AT, PL, PT, UK, NO</td>
<td>Men: 15-40g pure alcohol per day. Women: 8-20g pure alcohol per day.</td>
<td>CZ, EE, AT, PL. Norway: SHOULD NOT EXCEED 5% ENERGY INTAKE</td>
</tr>
<tr>
<td>Generic message</td>
<td>2 EU MS</td>
<td>LT*, RO*</td>
<td>'limit intake', 'drink in moderation'</td>
<td></td>
</tr>
</tbody>
</table>

* Indicates the guidance is included in national nutrition recommendations
## Worldwide policies addressing alcohol-related harm

| REDUCE AVAILABILITY | Restrictions on sales  
| Patrons |
|---------------------|-------------------------------------------------------|
| GUIDE CHOICE THROUGH (DIS)INCENTIVES | Taxes  
| Drink-driving policies  
| Pricing |
| ENABLE OR GUIDE CHOICE THROUGH CHANGING DEFAULTS | Marketing restrictions |
| PROVIDE INFORMATION | Labelling legislation  
| Voluntary labelling  
| Public health campaigns  
| Recommendations and guidelines |
| MONITORING | Enforcement of age limits  
| Marketing restrictions |
Stay in touch

EU Science Hub: ec.europa.eu/jrc
Twitter: @EU_ScienceHub
YouTube: EU Science Hub

Facebook: EU Science Hub – Joint Research Centre
LinkedIn: Joint Research Centre