

# To drink or not to drink? Is moderate alcohol drinking possible?

---

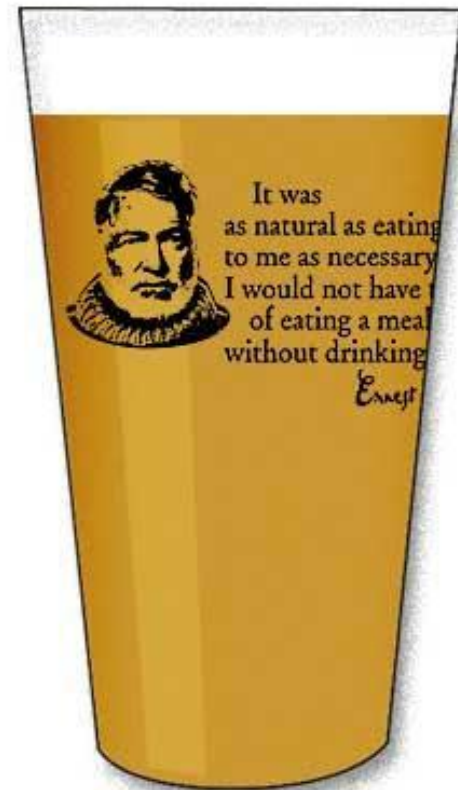
中國醫藥學院附設醫院  
精神醫學部 成癮防治科  
成癮醫學研究中心  
黃介良 醫師

China Medical University  
Hospital  
Addiction division of  
Psychiatry Department  
Addiction Research Center  
Chieh-Liang Huang, MD

---

It was as natural as  
eating and to me as  
necessary,  
and I would not have  
thought of eating a  
meal without  
drinking....  
beer

--Ernest Hemingway



# 節制飲酒 Alcohol

表一 酒精使用疾患分類

	美國預防醫學特別委員會建議 安全飲酒量	危害性飲酒 Hazardous drinking	傷害性飲酒 Harmful drinking
定義	男性21單位/週； 2標準飲酒當量/天 女性14單位/週； 1標準飲酒當量/天	男性> 8單位/天； > 5標準飲酒當量/天 女性> 6單位/天； > 3標準飲酒當量/天 因飲酒而有導致不良結果的風險但無合併酒精相關性疾病	已造成身體或生理上的傷害。 急性傷害，如：急性胰臟炎；慢性 傷害，如：酒精相關性腦病變。 需排除依賴性飲酒症候群。

註：1單位=8克酒精；1標準飲酒當量=12克酒精

My Doctor said "Only 1 glass of alcohol a day". I can live with that.



# 酒精與生理疾病

---

- 濫用酒精，就會造成傷害
- 飲用酒精可導致三種類型的傷害：
  - 生理的(physical)
  - 心理的(psychological)
  - 社會的(social)
- 因濫用酒精所造成的致死率(mortality rate)，大約是一般人的2倍。
- 酒癮者若持續不斷的飲酒，平均會夭壽10-12年□。

# 酒精與生理疾病

---

- 喝酒造成的死亡原因大致可分為：
  - 1. 直接死因：急性酒精中毒，酒精戒斷症候群
  - 2. 典型致死後遺症 (sequelae)：肝病，胰臟病，心臟病
  - 3. 經常致死後遺症 (sequelae)：高血壓，腦疾病，肺炎，低血糖，癌症，肺結核
  - 4. 致死事件 (incidents)：意外事故 (accident)，自殺

# CAUSAL MODEL OF ALCOHOL CONSUMPTION

---

# ALCOHOL AND CANCER

---



# ALCOHOL AND CANCER

## DECLINE IN RISK OF OESOPHAGEAL CANCER AFTER DRINKING CESSATION: **16** YEARS

---



# Alcohol and Mortality

---

# Alcohol and All-Cause Mortality

---



# **Alcohol and All-Cause Mortality**

***Meta-analysis of 34 Prospective Studies***

---

---

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

# **Alcohol and All-Cause Mortality**

***Meta-analysis of 34 Prospective Studies***

---

---

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

# Alcohol and All-Cause Mortality

---



# Alcohol and All-Cause Mortality

---



---

Wannamethee et al., American Journal of Public Health 1999

# Alcohol and All-Cause Mortality

---

- The findings support the suggestion that regular intake of **all types of alcoholic** drinks is associated with a lower risk of major **CHD** events.
- no evidence that regular drinking is associated with a lower risk of **all-cause mortality**



# Patterns of alcohol consumption and ischaemic heart disease

---

- follow up of 4.7 years, the SMART study (Netherlands, n = 5447) were followed for cardiovascular events and mortality hazard ratio for hard coronary events compared with regular drinkers
- Moderate alcohol consumption (1–2 drinks/day) is not only associated with a reduced risk of vascular and all-cause death in a high risk patients with clinical manifestations of vascular disease, but also with reduced risks of non-fatal events like CHD, stroke and possibly amputations

# Patterns of alcohol consumption and ischaemic heart disease

---

- 2405 men from Belfast (Northern Ireland) and 7373 men from the French
- hazard ratio for coronary events compared with regular drinkers
  - binge drinkers 1.97 (95% CI 1.21 to 3.22)
  - never drinkers 2.03 (95% CI 1.41 to 2.94)
  - former drinkers 1.57 (95% CI 1.11 to 2.21)
- Conclusions:
  - **Regular and moderate** alcohol intake throughout the week is associated with a low risk of ischaemic heart disease
  - the **binge drinking** pattern more higher risk.
  - Heavy or binge drinking is associated with a higher risk of ischaemic heart disease than is regular drinking

# Patterns of alcohol consumption and ischaemic heart disease

## Potential Mediating Mechanisms

---

- Compared with abstainers, alcohol intake of 5 to 14.9 g/d was associated with 26%, 35%, and 51% lower risk of CVD, total death, and CVD death, respectively, in a multivariable model.
- Lipids made the largest contribution to the lower risk of CVD (28.7%), followed by hemoglobin A1c/diabetes (25.3%), inflammatory/hemostatic factors (5%), and blood pressure factors (4.6%).

# Beneficial mechanisms of nifedipine to moderate alcohol consumption

---

# on the Relationship between Stress and Depression

---

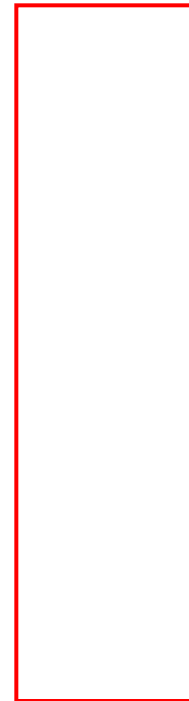


**Fatal motor vehicle accidents:  
BAC = 0.01% is associated with  
significantly more dangerous accidents  
than BAC = 0.00%**

---

# Fatal motor vehicle accidents: BAC = 0.01% is associated with significantly more dangerous accidents than BAC = 0.00%

---



Group 1 (all persons inside the driver's vehicle)  
Group 2 (only drivers)  
Group 3 (only drivers with no evidence of fatigue or  
inattention)  
Group 4 (only drivers with no evidence of fatigue or  
inattention *and* are involved in single vehicle  
crashes)

# Moderate Alcohol Use during pregnancy decreased infant birth weight

---

- Ingestion of an average of one ounce of absolute alcohol daily **before** pregnancy was associated with an average decrease in birth weight of **91 grams**;
- one ounce of absolute alcohol daily in **late** pregnancy was associated with a decrease of **160 grams**.



# Alcohol Intake and Cerebral Abnormalities on Magnetic Resonance Imaging

---

- A protective effect of low to moderate alcohol intake on cerebral infarction was **not found**,
- increased alcohol intake was associated with **brain atrophy**

# Moderate alcohol drinking approve V.S. against

---

- **abstinence as a treatment goal is logical**

- **abstinence is possible**

- **control are extremely difficult and generally unsuccessful**

- **Opens the door to treatments**

- **harm reduction**

- **offers a third alternative other than stop or go**

# MODERATE ALCOHOL DRINKING APPROVE V.S. AGAINST

---

“ I am willing to work with any client, no matter what his or her goal happens to be, including abstinence or harm reduction.”

If a hypertensive says “ I won’t change my diet, I refuse to take my meds, but I will take a walk around the block once a day for exercise,” the physician doesn’t say, “ well that’s a place to start; let me know how it goes and come back in a month.”

# moderate drinking research

---

---

---

---

---

---

# ARGUED ABOUT

## MODERATE DRINKING RESEARCH

---

- The analyses used 38 627 IHD events (mortality or morbidity) among 957 684 participants.
- Although some form of a cardioprotective association was confirmed in all strata,
- substantial heterogeneity across studies remained unexplained and confidence intervals were relatively wide, in particular for average consumption of one to two drinks/day.

# moderate drinking research

---



# moderate drinking research

---

- Methodology problems
    - Definition of alcohol use: duration and amount
    - some drinking and nondrinking groups change their alcohol consumption overtime
    - potential life-style confounding factors
      - e.g. smoking
      - Healthy behaviors tend to cluster
      - Economic status
-

# SUMMERY

---

- **Basic agreement**
    - **abstinence** is the **best** treatment goal
    - (Heavy) alcohol use is **harmful**
  - **On current or past **alcohol use disorder patient**, it is very impossible of moderate drinking**
  - **Need further research for moderate drink on general population**
  - **We need more preparation and discussion about the moderate drinking**
-



---

存在那裡的，只有他，  
和他杯中的威士忌而已。  
如果那酒吧裡除了他之外一個客人也沒有的話，  
恐怕他一點都不會在意。

那微笑顯示正好適量的酒，  
正好在適量時刻喝乾的意思。

如果我們的語言是威士忌.村上春樹.1999

---

Thanks for your attention!

---

耶穌把水變成酒，

你大概是那總把酒變成水的。

完全顛倒的神蹟

每個人都死了。馬修·史卡德

---