

하루 한 두잔의 가벼운 음주도 암을 일으키는가?

명 승 권

국립암센터 국제암대학원대학교 암관리정책학과, 국립암센터 가정의학과/분자역학연구과/암예방검진센터

국민 암 예방 수칙 일부 개정

- **2016년 3월 21일 암 예방의 날 (보건복지부와 국립 암센터)**
 - 제정 10주년이 된 암 예방 수칙 중 음주와 예방접 종에 대해 일부 개정을 발표함.
 - 기존: 술은 하루 두 잔 이내로만 마시기
 - 개정안: 암 예방을 위해서 하루 한 두잔의 소량 음 주도 피하기

국민 암 예방 수칙

1. 담배를 피우지 말고, 남이 피우는 담배 연기도 피하기
2. 채소와 과일을 충분하게 먹고, 다채로운 식단으로 균형 잡힌 식사하기
3. 음식을 짜지 않게 먹고, 탄 음식을 먹지 않기
4. 암 예방을 위해서 하루 한 두잔의 소량 음주도 피하기
5. 주 5회 이상, 하루 30분 이상, 땀이 날 정도로 걸거나 운동하기
6. 자신의 체격에 맞는 건강 체중 유지하기
7. 예방접종 지침에 따라 **B형 간염과 자궁경부암 예방접종** 받기
8. 성 매개 감염병에 걸리지 않도록 안전한 성생활 하기
9. 발암성 물질에 노출되지 않도록 작업장에서 **안전 보건 수칙** 지키기
10. 암 조기 검진 지침에 따라 **검진**을 빠짐없이 받기

국민 암 예방 수칙 일부 개정 근거(보도자료)

- 국제암연구소(IARC): 음주는 1군 발암요인으로, 음주에 의해 구강암, 인후 암, 후두암, 식도암, 간암, 유방암, 직장·대장암 발생 위험이 증가함
- 해외 연구에서도 소량의 음주(하루 1-2잔)로 구강암, 식도암, 유방암, 간암, 대장암 발생이 증가한다는 연구 결과가 다수 보고
 - 1) EU 암예방 권고사항: 음주 부분은 기존 '남자 2잔, 여자 1잔 이내(2003년)'에서 '암 예방을 위해서 음주하지 말 것(2014년)'으로 개정(Scoccianti et al, Cancer Epidemiol, 2015)
 - 2) 가벼운 음주(하루 1잔, 알코올 섭취량 12g 이하)에도 암 발생 위험은 구강인두암 17%, 식도암 30%, 유방암 5%, 간암 8%, 대장암 7% 증가(Bagnardi et al, Annals of Oncology, 2013)
 - 3) 미국 간호사 10만명을 추적 관찰한 연구에 의하면, 일주일에 3~6잔(하루 알코올 섭취량 5~10g)의 음주로 유방암 발생 위험이 15% 증가

문제점 (1) - EU 권고안의 오류

- 각 암종에 대해 환자-대조군 연구와 코호트 연구 결과의 차이를 구분하지 않음.
- 대장암의 경우 가벼운 음주가 아니라 중등도 음주의 결과를 잘못 인용함.

Table 3. Pooled RR estimates for colorectal cancer incidence stratified by colon site, sex, geographical region, and potential modifying factors

Factors stratified	Drinkers versus non-occasional drinkers ^a				Light versus non-occasional drinkers ^a				Moderate versus non-occasional drinkers ^a				Heavy versus non-occasional drinkers ^a							
	No. of studies ^b	RR	LCI	UCI	P value ^c	No. of studies ^b	RR	LCI	UCI	P value ^c	No. of studies ^b	RR	LCI	UCI	P value ^c	No. of studies ^b	RR	LCI	UCI	P value ^c
All studies	57	1.12	1.06	1.19		49	1.00	0.95	1.05		53	1.21	1.13	1.29		19	1.52	1.27	1.81	
Site																				
Colon	42	1.05	0.99	1.12	0.03	36	0.96	0.90	1.02	0.05	39	1.15	1.06	1.24	0.27	16	1.43	1.23	1.67	0.56
Rectum	38	1.19	1.09	1.31		32	1.06	0.98	1.14		35	1.23	1.13	1.35		15	1.59	1.18	2.15	

Annals of Oncology
REVIEWS
Annals of Oncology 24: 1053-1061, 2013
doi:10.1093/annonc/mdt001
Published online 17 August 2013

Light alcohol drinking and cancer: a meta-analysis
V. Bagnardi^{1,2*}, M. Rotasi³, E. Botteri^{4,5}, J. Tormaceanu⁶, F. Islami⁷, V. Fedirko⁸, L. Scotti⁹, M. Jenab¹⁰, F. Turati¹¹, E. Pasquini¹², C. Piskunov¹³, R. Ballocco¹⁴, E. Naghi¹⁵, G. Comas¹⁶, J. Palmieri¹⁷, P. Boffetta¹⁸ & C. La Vecchia^{1,18}

Background: There is convincing evidence that alcohol consumption increases the risk of cancer of the colorectum, breast, larynx, liver, esophagus, oral cavity and pharynx. Most of the data derive from studies that focused on the effect of moderate/high alcohol intakes, while little is known about light alcohol drinking (up to 1 drink/day).

Patients and methods: We evaluated the association between light drinking and cancer of the colorectum, breast, larynx, liver, esophagus, oral cavity and pharynx, through a meta-analytic approach. We searched epidemiological studies using PubMed, ISI Web of Science and EMBASE, published before December 2010.

Results: We included 222 articles comprising ~92 000 light drinkers and 60 000 non-drinkers with cancer. Light drinking was associated with the risk of oropharyngeal cancer [relative risk (RR) = 1.17; 95% confidence interval (CI) 1.06–1.29], esophageal squamous cell carcinoma (SCC) [RR = 1.30; 95% CI 1.09–1.56] and female breast cancer (RR = 1.05; 95% CI 1.02–1.08). We estimated that ~5000 deaths from oropharyngeal cancer, 24 000 from esophageal SCC and 5000 from breast cancer were attributable to light drinking in 2004 worldwide. No association was found for colorectum, liver and larynx tumors.

Conclusions: Light drinking increases the risk of cancer of oral cavity and pharynx, esophagus and female breast.

Key words: alcohol, cancer, lifestyle, meta-analysis, public health, risk factor

Introduction
The broad range of alcohol consumption patterns, from heavy to occasional/banquet drinking, creates significant public health and safety problems in nearly all countries. Globally, 4.2 and 1.7% of all male and female deaths were attributable to alcohol, and to 2001 over 2.2 million deaths were related to alcohol, and to 2004 over 2.2 million deaths were related to alcohol [1].

Regarding the association with cancer, 30% of all cancers (5.2% in men, 1.7% in women) are attributable to alcohol drinking [2]. There is convincing evidence that alcohol consumption increases the risk of cancer in the colorectum, breast, liver, larynx, oral cavity and pharynx [3] and a substantial increase in the risk of cancer with increasing levels of alcohol was observed for all these cancers [4]. Most of the evidence on the alcohol-cancer link derive from studies that focused on light and moderate intake of alcohol. However, a solid evidence of an association between low levels of alcohol intake and cancer is still lacking. There is a public health point of view: it is of considerable interest to establish whether light drinking is associated with cancer, even if it implies only a weaker risk increase. In fact, a risk increase of small magnitude affecting a large proportion of population could convert into major negative health impact [5, 6].

Therefore, to clarify this issue, we carried out a meta-analysis of published studies to evaluate the association between light drinking (defined as up to 1 drink/day) and cancer.

materials and methods
search strategy
We searched the literature on light drinking and cancer using for which there is evidence of an increased risk associated with alcohol consumption to general. For the purposes, we used three of the databases shown up by the International Agency for Research on Cancer [7], which listed all the areas in which there is sufficient evidence for

© The Author 2013. Published by Oxford University Press on behalf of the European Society for Medical Oncology. All rights reserved. For permission, please see <http://annonc.oxfordjournals.org/permissions>

“가벼운 음주(하루 1잔, 알코올 섭취량 12g 이하)에도 암 발생 위험은 구강인두암 17%, 식도암 30%, 유방암 5%, 간암 8%, 대장암 7% 증가 (Bagnardi et al, Annals of Oncology, 2013)”

Background: There is convincing evidence that alcohol consumption increases the risk of cancer of the colorectum, breast, larynx, liver, esophagus, oral cavity and pharynx. Most of the data derive from studies that focused on the effect of moderate/high alcohol intakes, while little is known about light alcohol drinking (up to 1 drink/day).

Patients and methods: We evaluated the association between light drinking and cancer of the colorectum, breast, larynx, liver, esophagus, oral cavity and pharynx, through a meta-analytic approach. We searched epidemiological studies using PubMed, ISI Web of Science and EMBASE, published before December 2010.

Results: We included 222 articles comprising ~92 000 light drinkers and 60 000 non-drinkers with cancer. Light drinking was associated with the risk of oropharyngeal cancer [relative risk (RR) = 1.17; 95% confidence interval (CI) 1.06–1.29], esophageal squamous cell carcinoma (SCC) [RR = 1.30; 95% CI 1.09–1.56] and female breast cancer (RR = 1.05; 95% CI 1.02–1.08). We estimated that ~5000 deaths from oropharyngeal cancer, 24 000 from esophageal SCC and 5000 from breast cancer were attributable to light drinking in 2004 worldwide. No association was found for colorectum, liver and larynx tumors.

Conclusions: Light drinking increases the risk of cancer of oral cavity and pharynx, esophagus and female breast.

Key words: alcohol, cancer, lifestyle, meta-analysis, public health, risk factor



