LOW-RISK DRINKING GUIDELINES

A GUIDE FOR DIETITIANS AND NUTRITIONISTS

Ordre professionnel des diététistes du Québec

Éduc alcool

INTRODUCTION

This guide is intended for for dietitians and nutritionists to help them explain the low-risk drinking guidelines to their patients. It is an essential companion to the brochure on the subject, produced for the general public.

Not uncommonly, people who have heard about a publication, read about it in a newspaper or seen an ad on television will ask a health care professional for more information. It is therefore important to ensure a consistent message, based on the latest scientific data. That is the reason for this guide, the purpose of which is to define moderate drinking and reduce the incidence of alcohol-related harm through screening, brief intervention and referral to specialized services.

The guidelines are not intended to encourage people who choose not to drink for cultural, religious or other reasons, to take up drinking; nor are they intended to incite people to start drinking to achieve health benefits.

Éduc'alcool and the Ordre professionnel des diététistes du Québec hope that this guide will be useful to dietitians and nutritionists in convincing patients that alcohol abuse is harmful to their health and that moderation is always in good taste.

GENERAL INFORMATION

This is the first set of national low-risk alcohol drinking guidelines. Over the past 20 years there have been four sets of drinking guidelines in Canada – from Éduc'alcool in Québec, the Centre for Addiction and Mental Health in Ontario, the Centre for Addictions Research of British Columbia, and the College of Family Physicians of Canada – leaving patients with a mix of information and guidance. A standardized set of guidelines is important to provide consistent, current information to help people make informed choices and quantify moderation.

The guidelines provide information on how to reduce the risk of alcohol-related harm in both the short and long term. Risk levels are expressed in terms of the "standard Canadian drink," which is defined as 17.05 ml or 13.45 g of ethanol.

These guidelines were developed in November 2010 by a committee of experts mandated by the National Alcohol Strategy Advisory Committee (Butt et al., 2011).

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THE GUIDELINES

A standard drink is

- one regular **beer** (341 ml / 12 oz, 5% v/v alcohol)
- one glass of **wine** (142 ml / 5 oz, 12% v/v alcohol)
- one glass of **fortified wine** (86 ml / 3 oz, 20% v/v alcohol)
- one glass of **spirits** (43 ml / 1.5 oz, 40% v/v alcohol)

As for **cider**, **malt liquor** and **premixed drinks**, which are generally, but not always, served in a 142 ml / 5 oz glass, you have to read the label to check the alcohol percentage, which varies between 2.5% and 20% v/v alcohol.

Glass of beer
341 ml/12 oz
5% alc./vol.

=

Glass of wine
142 ml/5 oz
12% alc./vol.

=

Glass of fortified wine
86 ml/3 oz
20% alc./vol.

=

Glass of spirits
43 ml/1.5 oz
40% alc./vol.

=

Glasses of cider
142 ml/5 oz
6% alc./vol.

GUIDELINE 1

REDUCING THE RISK OF CHRONIC ALCOHOL-RELATED HARM

These recommended drinking limits aim to reduce ***long-term*** health risks.

WOMEN

0-2 standard drinks per day

No more than 10 standard drinks per week

MEN

0-3 standard drinks per day

No more than 15 standard drinks per week

Advise patients:

- To have some non-drinking days every week to minimize tolerance and habit formation.
- Not to increase drinking to the upper limit, since health benefits are greatest up to 1 standard drink per day.
- That adults with reduced tolerance, whether due to low body weight, age (under 25 or over 65), or because they drink rarely or very little, should set lower limits than the general public.

See Section 2, *Communicating Alcohol-Related Health Risks*, to apply individual risk assessment to population-based guidelines.

GUIDELINE 2

REDUCING THE RISK OF ACUTE ALCOHOL-RELATED HARM

These recommendations aim to reduce ***short-term*** risks.

WOMEN

No more than 3 standard drinks in one day

MEN

No more than 4 standard drinks in one day

Advise patients:

- The risk of injury increases with each additional drink in many situations.
- To drink at the upper limit only ***occasionally*** and always stay within the ***weekly*** limits specified above.
- To drink with meals and not on an empty stomach.
- To have no more than 2 standard drinks in any 3-hour period.
- To alternate alcoholic drinks with caffeine-free, non-alcoholic beverages.
- To avoid risky situations and activities.

GUIDELINE 3

CONTRAINDICATIONS

Alcohol should be avoided in these situations.

Advise patients to abstain from alcohol when:

- Operating any kind of vehicle, machinery or tools.
- Using medications or other drugs that interact with alcohol.
- Engaging in sports or other potentially dangerous physical activities.
- Working.
- Making important decisions.
- Responsible for the care or supervision of others.
- Suffering from serious physical illness, mental illness or alcohol dependence.

GUIDELINE 4

PREGNANT WOMEN

For women who are pregnant, planning to be pregnant, or nursing.

Advise patients:

- The safest option during pregnancy or when planning to become pregnant is to abstain from drinking alcohol.
- Alcohol in the mother's bloodstream can harm the developing foetus. While the risk from light drinking during pregnancy appears very low, there is no threshold for alcohol use in pregnancy that has been definitively proven to be safe.
- Nursing mothers should not drink alcohol right before a feeding, as some of the alcohol passes into the breast milk and may affect the baby.
- Women who plan to drink alcohol can prevent or limit alcohol from reaching their babies by nursing or pumping breast milk before they drink.

For more information, see *Pregnancy and Drinking: Your Questions Answered*, co-published by Collège des médecins du Québec and Éduc'alcool.

GUIDELINE 5

ALCOHOL AND YOUNG PEOPLE

Advise patients that alcohol can affect healthy physical and mental development in children and adolescents.

For young people (up to age 18), advise patients that:

- Many young people do not drink.
- They should delay starting to drink until they are 18.
- If they have decided to start drinking, they should do so in a safe environment, under parental guidance, and limit their intake to 1-2 standard drinks no more than once or twice per week.

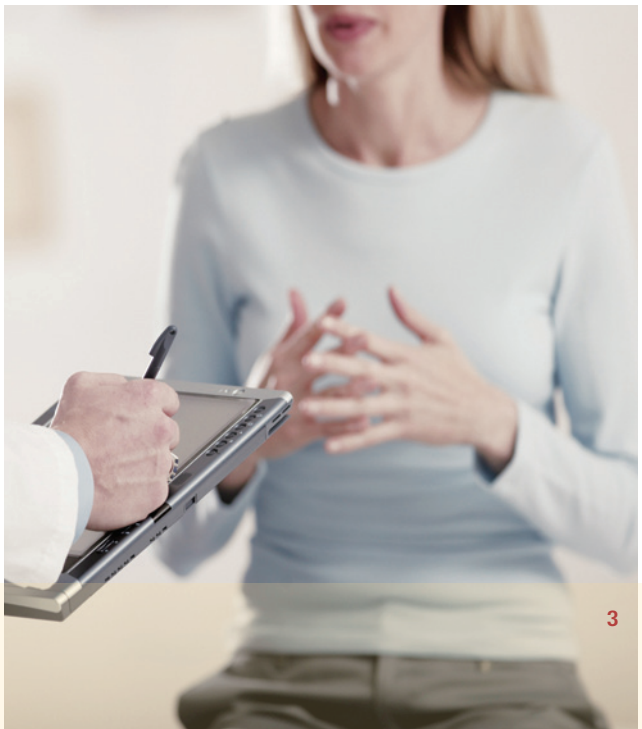
For young adults (age 18 to 24), advise patients that:

- From age 18 to 24, women should never have more than 2 standard drinks in one day and men should never have more than 3 standard drinks in one day.

For more information, see *The Effects of Early Alcohol Use*, published by Éduc'alcool.

Suggest that patients read the general-public version of *Low-Risk Drinking: 2 3 4 0*.

Additional details can be found in the scientific document on which these guidelines were based: *Alcohol and Health in Canada: A Summary of Evidence and Guidelines for Low-Risk Drinking.*



COMMUNICATING ALCOHOL-RELATED HEALTH RISKS

This section is meant to assist dietitians and nutritionists in discussing with their patients the risks of several serious illnesses associated with different levels of alcohol consumption.

Tables 1, 2 and 3 on the following pages – taken from the technical, scientific report that provided the basis for *Canada's Low-Risk Alcohol Drinking Guidelines* – show changes in the risk for a selected number of serious alcohol-related illnesses based on how many standard drinks a person has, on average, per day. These estimates are based on an analysis of a comprehensive database of scientific studies commissioned as an internal document by the Centre for Addiction and Mental Health.

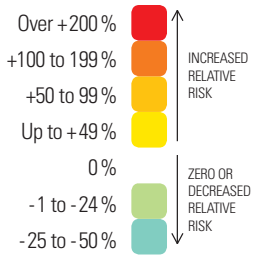
The data in the tables represent relative, not absolute, risk. Relative risk is the ratio of the probability of contracting a disease when exposed to a factor to the probability of contracting the disease when not exposed. It is a measure of association.

Table 1 summarizes the relative risks for 12 serious illnesses, including seven types of cancer, which apply equally for men and women under 70. Of note from this table:

- Having just one standard drink per day increases a person's risk of getting any one of the nine conditions highlighted in yellow by 3% to 42%. For these nine conditions, the risk rises with the number of standard drinks consumed per day.
- Tuberculosis is the only condition for which there is no significant change in risk until a particular "threshold" drinking level (namely, three or more standard drinks per day).
- With regard to ischemic heart disease, relative risk follows a J-curve: it drops by 14-19% at 3-4 standard drinks per day, is zero at 5-6 standard drinks per day and increases with greater consumption.

TABLE 1

Percentage variation in long-term relative risk for 12 similar diseases among men and women under the age of 70, by average number of standard drinks per day



Type of Illness or Disease	Proportion of All Deaths, 2002-2005	1 DRINK	2 DRINKS	3-4 DRINKS	5-6 DRINKS	+6 DRINKS
Tuberculosis	1 in 2,500	0	0	+194	+194	+194
Oral cavity & pharyngeal cancer	1 in 200	+42	+96	+197	+368	+697
Oral/Oesophageal cancer	1 in 150	+20	+43	+87	+164	+367
Colon cancer	1 in 40	+3	+5	+9	+15	+26
Rectal cancer	1 in 200	+5	+10	+18	+30	+53
Liver cancer	1 in 200	+10	+21	+38	+60	+99
Laryngeal cancer	1 in 500	+21	+47	+95	+181	+399
Ischemic heart disease	1 in 13	-19	-19	-14	0	+31
Epilepsy	1 in 1,000	+19	+41	+81	+152	+353
Dysrhythmia	1 in 250	+8	+17	+32	+54	+102
Pancreatitis	1 in 750	+3	+12	+41	+133	+851
Birth of a low birth-weight baby	1 in 1,000	0	+29	+84	+207	+685

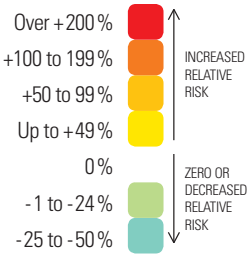
Source: Butt, P., and al., 2011. Reproduced with permission from the Canadian Centre on Substance Abuse.

Tables 2 and 3 present separate risk estimates for males and females for conditions where they are significantly different. Of note from the estimates in these tables:

- At lower drinking levels, women experience greater benefits for some conditions such as stroke and diabetes (in green). However, as alcohol intake increases, the risk for these conditions rises more rapidly for women than for men.
- At an average of just one standard drink per day, a woman's relative risk of developing lethal cirrhosis increases by 139%, compared to 26% for men.
- The risk levels from drinking for all the listed illnesses are also significant for persons 70 years of age or older, with similar patterns of protection and increased risk.

TABLE 2

Percentage variation in long-term relative risk for five diseases among men under the age of 70, by average number of standard drinks per day



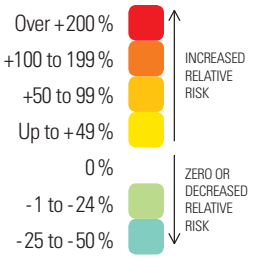
Type of Illness or Disease	Proportion of All Deaths, 2002-2005	1 DRINK	2 DRINKS	3-4 DRINKS	5-6 DRINKS	+6 DRINKS
Hemorrhagic stroke (morbidity)	---	+11	+23	+44	+78	+156
Hemorrhagic stroke (mortality)	1 in 30	+10	+21	+39	+68	+133
Ischemic stroke (morbidity)	---	-13	0	0	+25	+63
Ischemic stroke (mortality)	1 in 80	-13	0	+8	+29	+70
Diabetes mellitus	1 in 30	-12	0	0	0	+72
Hypertension	1 in 150	+13	+28	+54	+97	+203
Cirrhosis (morbidity)*	---	0*	0*	+33	+109	+242
Cirrhosis (mortality)	1 in 90	+26	+59	+124	+254	+691

Source: Butt, P., and al., 2011. Reproduced with permission from the Canadian Centre on Substance Abuse.

* Note : Rehm and colleagues (2010) estimate reduced risk of cirrhosis morbidity at these levels of consumption (one or two standard drinks per day). Given that there is no known biological reason for such a result, the relative risk has been artificially put at zero.

TABLE 3

Percentage variation in long-term relative risk for five diseases among women under the age of 70, by average number of standard drinks per day



Type of Illness or Disease	Proportion of All Deaths, 2002-2005*	1 DRINK	2 DRINKS	3-4 DRINKS	5-6 DRINKS	+6 DRINKS
Breast cancer	1 in 45	+13	+27	+52	+93	+193
Hemorrhagic stroke (morbidity)	---	-29	0	0	+78	+249
Hemorrhagic stroke (mortality)	1 in 20	+22	+49	+101	+199	+502
Ischemic stroke (morbidity)	---	-18	-13	0	+31	+121
Ischemic stroke (mortality)	1 in 65	-34	-25	0	+86	+497
Diabetes mellitus	1 in 30	-36	-40	0	+739	+1560
Hypertension	1 in 85	0	+48	+161	+417	+1414
Cirrhosis (morbidity)	---	+21	+70	+125	+182	+260
Cirrhosis (mortality)	1 in 160	+139	+242	+408	+666	+1251

Source: Butt, P., and al., 2011. Reproduced with permission from the Canadian Centre on Substance Abuse.

* Each cause of death in the above tables is reported in the second column as a proportion of total deaths for four years from 2002–2005, using Statistics Canada data.

There are other conditions caused by alcohol for which current data does not allow changes in risk to be determined according to alcohol intake. These include:

- alcohol dependence syndrome (alcoholism)
- alcoholic psychosis
- nervous system degeneration due to alcohol
- alcoholic polyneuropathy, myopathy and cardiomyopathy
- alcoholic gastritis
- alcoholic liver diseases and alcoholic hepatitis
- alcohol-induced pancreatitis
- foetal alcohol spectrum disorder
- alcohol toxicity and poisoning

FAQ

FREQUENTLY ASKED QUESTIONS

These FAQs were developed to assist dietitians and nutritionists in promoting and explaining the *Low-Risk Drinking Guidelines* to patients. They are not intended specifically for the general public, but could be useful to dietitians and nutritionists who want to make the data more understandable when talking to patients.

When promoting the guidelines, it is important to remember that

- these are *low-risk*, *not no-risk*, guidelines
- the guidelines set *limits*, not targets
- the guidelines are for adults aged 25-65 who choose to drink or who plan to do so.

What do the *Low-Risk Drinking Guidelines* recommend?

To reduce long-term risks, the first guideline recommends that women should have no more than 10 standard drinks a week, with no more than two standard drinks a day most days. Men should have no more than 15 standard drinks a week, with no more than three standard drinks a day most days. Everyone should plan non-drinking days every week.

The second guideline aims to reduce the short-term risk of injury and harm from drinking alcohol. It recommends that women consume no more than three standard drinks, and men no more than four, on any single occasion.

The other three guidelines identify population segments (such as youth and pregnant women) and situations where alcohol should be avoided (e.g., when driving or taking medication). Tips are provided to help further reduce the risk of alcohol-related harm.

What are some of the health risks associated with alcohol?

Average long-term alcohol use (i.e., as little as one or two standard drinks per day) can lead to eight types of cancers (oral, pharyngeal, laryngeal, oesophageal, liver, breast, colon and rectal). It can also lead to other serious problems such as seizures, pancreatitis, low birth weight, foetal alcohol spectrum disorder (FASD), stroke, cardiac arrhythmia, cirrhosis and hypertension. In addition, during or after a specific drinking occasion, there is an increased short-term risk of injuries associated with motor vehicle crashes and abusive or violent behaviour, as well as other harms such as alcohol poisoning.

Why are these guidelines different from previous ones developed in Canada and those in other countries?

These guidelines are based on the most current scientific evidence. They identify daily limits where the potential health risks and health benefits cancel each other out exactly. As well, the amount of alcohol contained in a drink varies among different guidelines, so a consistent and standardized definition was needed.

Why do the guidelines contain two different sets of limits?

The first set of limits is based on research related to the long-term risk of serious diseases associated with alcohol consumption, as well as the evidence of health benefits related to diabetes and some heart conditions.

The second set of limits, those for special occasions, is based on evidence related to the risk of harm that can occur during or after a specific drinking occasion. This includes injuries from falls, motor vehicle crashes, and abusive or violent behaviour.

In the second guideline, what does "single occasion" mean?

People should drink at the upper limit only occasionally. However, the term "occasionally" has not been well defined. The limits are derived from average levels of daily consumption reported in hundreds of different studies, very few of which go into this kind of subtle variation over days. As a precautionary principle, researchers now suggest we should consider single occasions to be special occasions that occur infrequently – certainly no more than once a week. People should always abide by the weekly limits specified in the first guideline.

What are the risks of drinking the weekly maximum in one night or over one weekend?

The risk of alcohol-related injuries increases with each drink. In addition to wiping out any potential benefits of light drinking, occasional episodes of heavy drinking increase the risk of short-term harm, such as injuries, poisoning and illnesses, as well as long-term harm such as cancers and liver diseases. The weekly limits are designed to be just that – a weekly limit, not a daily limit.

Why are the drinking limits different for men and women?

The limits are different because research shows that alcohol puts women at greater risk for certain alcohol-related illnesses than men (e.g., breast cancer, stroke, diabetes, high blood pressure, liver disease). For example, when a woman has an average of one drink per day, it is estimated that her risk of lethal cirrhosis increases by 139%, compared to 26% for a man. Additionally, the risk of stroke for women is at least double the risk for men when the limits in the guidelines are exceeded.

These gender differences occur for several reasons. On average, women weigh less than men, and smaller people reach higher blood-alcohol levels than larger people. In addition, kilogram for kilogram, women have less water in their bodies than men do, so even if a woman and a man of the same weight drink an equal amount of alcohol, the woman's blood-alcohol concentration will be higher. Finally, women have fewer alcohol-metabolizing enzymes and they digest alcohol in their stomachs differently than men.

The guidelines are a starting place for women to assess their drinking habits.

FAQ

Are there exceptions to the guidelines?

The *Low-Risk Drinking Guidelines* are intended for people 25-65 years of age. See below for age-specific recommendations for those outside this range. The guidelines recommend abstinence for high-risk groups, such as people with alcohol dependence, youth and pregnant women.

They also recommend extreme caution when drinking alcohol in high-risk situations, such as driving or operating machinery, making important decisions, or taking medications and/or other drugs.

• Youth (under 18)

The key message for youth is to delay drinking at least until their late teens. Alcohol can impair the healthy physical and mental development of children and adolescents. It is important to remember that many young people choose not to drink. However, if they do decide to drink, they should do so in a safe environment under parental guidance, never have more than one or two standard drinks at a time, and never drink more than once or twice a week. They should plan ahead and consider the safe drinking tips in the brochure *Low-Risk Drinking: 2 3 4 0*.

For more information, see Éduc'alcool, *The Effects of Early Alcohol Use*.

• Young adults (18 to 24)

From their late teens to age 24, women should never have more than two standard drinks per day or 10 standard drinks per week. Young men should never have more than three standard drinks per day or 15 standard drinks per week. Both men and women should have non-drinking days each week.

• Seniors (over 65)

Seniors should never exceed the recommendations of the guidelines: two standard drinks per day or 10 standard drinks per week for women, and three standard drinks per day or 15 standard drinks per week for men. As people age, they metabolize alcohol more slowly and may become more sensitive to its effects. This can place them at increased risk for accidents, falls and the worsening of some health issues. Also, many seniors often take a variety of drugs that affect the central nervous system and the guidelines recommend avoiding alcohol while taking medication.

For more information, see Éduc'alcool, *Alcohol and Seniors*.

• Pregnancy

Alcohol in the mother's bloodstream can harm a developing foetus. While the risk from light drinking during pregnancy appears very low, there is no threshold of alcohol use in pregnancy that has been definitely proven to be safe. Therefore, the best advice for women who are pregnant or planning to become pregnant is that the safest choice is to drink no alcohol at all. They should discuss any alcohol use with their their physician, pharmacist, dietitian and nutritionist or other health care professional.

For more information, see:

- Éduc'alcool and Collège des médecins du Québec, *Pregnancy and Drinking: Your Questions Answered*.
- Society of Obstetricians and Gynaecologists, *Consensus Clinical Guidelines on Alcohol Use and Pregnancy.*

• Breastfeeding

Nursing mothers should be advised to not drink alcohol right before a feeding, as alcohol passes into the breast milk and affects the baby. Alcohol may affect the infant's short-term sleep patterns and gross motor development. Alcohol can also alter the milk letdown reflex and decrease the amount of milk the baby gets. Nursing mothers who plan to drink alcohol should be informed that there are things they can do to make sure the alcohol doesn't reach their babies, such as pumping breast milk or breastfeeding before they drink.

For more information, see: Éduc'alcool and Collège des médecins du Québec, *Pregnancy and Drinking: Your Questions Answered*.

• Driving or operating machinery

While the blood-alcohol concentration limit for driving is set by law, the safest option is to not drink before driving or operating a motor vehicle. Operating any kind of vehicle, machinery or tools requires coordinated mental and physical skills. Alcohol interferes with and reduces a person's ability to perform these skills, increasing the risk of crashes and other negative health outcomes. Before drinking alcohol, people should plan ahead for a safe ride home by naming a designated driver who has not been drinking, arranging for a taxi or using public transportation.

For more information, see Éduc'alcool, *Drinking. Driving. Making the Right Choice*.

• Medications

The combination of alcohol and medications, including over-the-counter drugs, can result in serious harm and even death. Alcohol can make medications less effective; it can also affect the body's ability to process them, making them overly strong. Anyone who is considering drinking while taking prescription or over-the-counter medications should always check for warnings on the packaging, and consult their physician or pharmacist to see whether alcohol should be avoided entirely.

For more information, see Éduc'alcool, *Alcohol Combinations*.

• Other legal and illegal drugs

Combining alcohol and other drugs can result in serious harm and even death, and should be avoided.

For more information, see Éduc'alcool, *Alcohol Combinations*.

• Physical and mental illnesses

Physical and mental illness heightens the effects of alcohol, and the impact can be particularly serious in some circumstances. Alcohol can affect the disease process or the impact of medications. Alcohol also affects a person's risk for developing a number of health conditions. For example, at even one drink per day over a period of time, a person's risk for any one of several different types of cancer increases dramatically. People should consult their physician or health care professional to determine whether it is safe for them to drink alcohol and, if so, how much, in light of their health condition and risk status.

For more information, see Éduc'alcool, *Alcohol and Mental Health*.

• Alcohol dependence

When a person is severely dependent on alcohol, complete abstinence is generally recommended. Signs of alcohol dependence include needing to drink an increasing quantity of alcohol to get the same effect, feeling unable to restrict drinking to one or two drinks, and feeling anxious or shaky the morning after drinking heavily.

FAQ

Given that there are some health benefits related to alcohol, should people drink to the limit each week?

The guidelines set *limits*, not targets; they don't prescribe how much people should drink. No one should increase their drinking to the limit or drink consistently at the limit, as health benefits are greatest at up to one standard drink per day. Moderate alcohol consumption (i.e., approximately one standard drink per day) appears to provide some protection against diabetes and some forms of heart disease for men and women over 45. However, as daily consumption increases, so too does the risk of a wide range of physical and mental illnesses, including a number of cancers, liver disease and depression. Drinking in excess of the recommendations in the guidelines (e.g., more than two standard drinks a day for women and more than three a day for men) cancels out any health benefits.

If someone drinks more than the limits set by the guidelines, is he/she an alcoholic?

No. Alcohol dependence is a complex and serious health condition. If you are worried about your drinking habits or those of someone close to you, speak to a physician.

How often will the guidelines be updated?

The guidelines are based on the best evidence available in late 2010. On behalf of the National Alcohol Strategy Advisory Committee, the Expert Advisory Panel, which includes Éduc'alcool's senior researcher, will review the guidelines at regular intervals and whenever new data is available. Updated versions will be available at the Éduc'alcool website.

REFERENCES

Butt, P., D. Beirness, L. Gliksman, C. Paradis, et T. Stockwell (2011). *Alcohol and health in Canada : A summary of evidence and guidelines for low-risk drinking*, Ottawa (ON), Canadian Centre on Substance Abuse.

Carson, G., L.V. Cox, J. Crane, P. Croteau, L. Graves, S. Kluka, G. Koren, M.J. Martel, D. Midmer, and I. Nulman (2010). "Alcohol use and pregnancy consensus clinical guidelines," *Journal of Obstetrics and Gynaecology Canada/Journal d'obstétrique et gynécologie du Canada*. 32 (8 Suppl 3):S1.

Canadian Centre on Substance Abuse (2012a). *Canada's Low-Risk Alcohol Drinking Guidelines: Frequently Asked Questions*, Ottawa (ON).

Canadian Centre on Substance Abuse (2012b). *Canada's Low-Risk Alcohol Drinking Guidelines: Communicating alcohol-related health risks*, Ottawa (ON).

Canadian Centre on Substance Abuse (2012c). *Guidelines for Healthcare Providers to Promote Low-Risk Drinking Among Patients*, Ottawa (ON).

National Alcohol Strategy Advisory Committee (2012). *Canada's Low-Risk Alcohol Drinking Guidelines* [Brochure], Ottawa (ON).

Éduc'alcool (2006). *Alcohol and Seniors*, Montréal (QC).

Éduc'alcool (2007). *Low-Risk Drinking: 2 3 4 0*, Montréal (QC).

Éduc'alcool (2008). *Alcohol Combinations*, Montréal (QC).

Éduc'alcool (2009). *The Effects of Early Alcohol Use*, Montréal (QC).

Éduc'alcool (2011). *Alcohol and Mental Health*, Montréal (QC).

Éduc'alcool (2012). *Drinking. Driving. Making the Right Choice*, Montréal (QC).

Éduc'alcool and Collège des médecins du Québec (2008). *Pregnancy and Alcohol. Your questions answered*, Montréal (QC).

Rehm, J., B. Taylor, S. Mohapatra, H. Irving, D. Baliunas, J. Patra, and M. Roerecke (2010). "Alcohol as a risk factor for liver cirrhosis: A systematic review and meta-analysis," *Drug and Alcohol Review*. 29 (4):437-445.

Rehm, J., T. Kehoe, B. Taylor, and J. Patra (2009). *Evidence base for the development of Canadian drinking guidelines: Report prepared for the Low Risk Drinking Guidelines Expert Working Group by the Centre for Addiction and Mental Health*, Ottawa (ON).

La version originale de ce document est disponible en français.

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Canadian Centre **on Substance Abuse**

Centre canadien **de lutte contre les toxicomanies**

The reports in Éduc'alcool's *Alcohol and Health* series are well-researched and easy to read. Each one gets straight to the point and is a valuable health, education and information resource.

All of them may be downloaded from the Éduc'alcool website **www.educalcool.qc.ca** or ordered by calling **1 888 ALCOOL1**.

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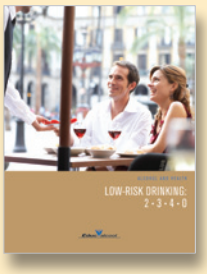
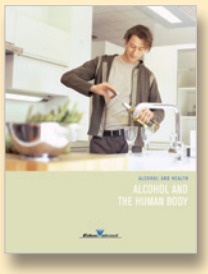


LOW-RISK DRINKING: 2 3 4 0

A basic guide to the rules of low-risk drinking for men and women.

2



ALCOHOL AND THE HUMAN BODY

An explanation of what happens to alcohol as it passes through the body and the effects it produces.

3

THE EFFECTS OF MODERATE AND REGULAR ALCOHOL CONSUMPTION

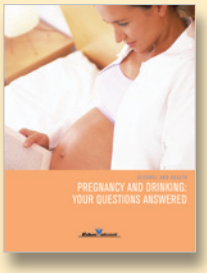
A brochure summarizing the research on the health effects of moderate, regular drinking.

4

THE EFFECTS OF ABUSIVE DRINKING

A review of the physiological and psychological effects of abusing drinking. The consequences of both chronic and occasional excessive drinking are highlighted.

5



PREGNANCY AND DRINKING

Straight forward answers to frequently asked questions about drinking during pregnancy and breast-feeding, for pregnant woman and those who might become pregnant.

6

ALCOHOL COMBINATIONS

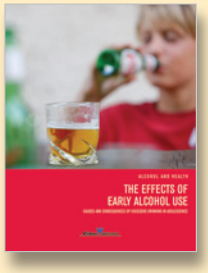
A brochure explaining the beneficial, harmful and downright dangerous effects of combining alcohol with various other substances or activities.

7

ALCOHOL AND SENIORS

A description of the effects of alcohol on people 65 and older. Includes valuable advice for seniors, their families, friends and caregivers.

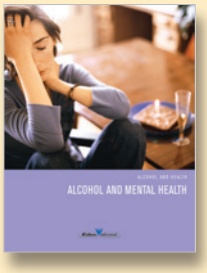
8



THE EFFECTS OF EARLY ALCOHOL USE

Examines the harmful effects of early alcohol use and explains the basic reasons why young people should not have unrestricted access to alcohol.

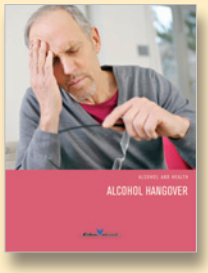
9



ALCOHOL AND MENTAL HEALTH

Reviews on the effects of alcohol on mental health. Explains the connections and interactions between mental health disorders and problem drinking and provides useful information and advice.

10



ALCOHOL HANGOVER

Abusive drinking has long-lasting effects even when blood alcohol content is back to zero.

Ordre professionnel
des diététistes
du Québec

www.opdq.org

Éduc alcool

Moderation is always in good taste.

www.educalcool.qc.ca 1 888 ALCOOL1