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Moderation as part of a Healthy Diet and Lifestyle: **A Look at Alcohol Inclusive Nutrition Concepts from Around the World**

1.Introduction

As part of cultural traditions and well balanced lifestyles wine, beer and spirits consumption has been a common staple in diets around the world. In acknowledgement of such practices, groups of nutrition experts have included the moderate consumption of alcohol as an optional component of various dietary guidelines and food guides such as: *the Mediterranean, Asian, Latin American and Vegetarian Pyramids*. Here we outline the key scientifically based nutrition messages in these pyramids.

The outlined alcohol-inclusive dietary pyramids are part of an effort by Oldways Preservation & Exchange Trust, a non- profit education group that is dedicated to preserving traditional eating patterns with the goal to improve consumer knowledge and diets around the world. Oldways has prepared these concepts with prominent nutrition, medical, biomedical and communication experts from leading institutions such as the WHO Regional Office for Europe and the Harvard School of Public Health.

Cardiovascular disease and cancer are leading causes of death in developed nations around the world, predominantly being associated with diets high in animal fats. With that emerging scientific consensus, the Oldways pyramids all emphasize fruits, vegetables, cereals and pulses with little meat (animal fats) consumption. These nutrition concepts also include wine, beer and spirits, which have shown to contribute to lower heart disease rates and improve longevity.

Accumulating scientific evidence suggests that moderate consumption of wine, beer and spirits does not pose a health risk to the vast majority of consumers who choose to drink in moderation. AIM's recommendations also emphasize that adults should enjoy alcohol beverages in a sensible manner, preferably around mealtimes or other responsible social settings. Moderation is the key to a healthy diet and lifestyle, and this is reflected in several traditional nutrition concepts.

Consumers should follow moderation guidelines such as those in the Dietary Guidelines for Americans which define moderation as up to two drinks (12g) a day for men and up to one drink a day for women; further, consumers should avoid alcohol during pregnancy or whenever it would put the individual or others at risk. To learn more about the US Dietary Guidelines message on alcohol, please visit www.health.gov/dietaryguidelines and for other authoritative links on alcohol please also visit the AIM links page on the gateway to sensible drinking and health site via www.aim-digest.com

II. Alcohol-Inclusive Nutrition Concepts:

The Eat Wise Concept

www.oldwayspt.org



The latest “Eat Wise” Pyramid, including “wine, beer and spirits in moderation” as part of a daily beverage recommendation was released at January’s 2003 Mediterranean Diet Conference sponsored by Harvard School of Public Health and Oldways Preservation & Exchange Trust. This new pyramid is modelled on the original Mediterranean Diet Pyramid, which initially only recommended wine in moderation, reflecting the cultural preference of the Mediterranean region. “This Eat Wise Pyramid is a visual guide to healthy living the Eat Wise way,” the accompanying text states. “It shows the partnership of a balanced diet, plenty of water, regular physical activity, and alcohol in moderation that wise eaters know strengthen all their bodies’ functions.” An expert conference discussion emphasized the potential benefits for all three beverages. Eat Wise Meal Ideas, shopping tips and recipes are outlined in a special eating guide that can be ordered via the Oldways website.

The Mediterranean Diet Concept

www.oldwayspt.org/pyramids/med/p_med.html

Long known for its healthy lifestyles and the longevity of its people, the Mediterranean region is also home of some of the most palatable and healthy foods on earth. Traditionally, wine has been included as an integral part of its meals, and cross-cultural studies have reported significantly lower risk of heart disease in Mediterranean regions where alcohol is a daily staple of a healthy diet and lifestyle. As the preferred beverage in this region, wine is specified as an option on “The Traditional Healthy Mediterranean Diet Pyramid,” developed by Oldways in cooperation with scientists from the WHO in Europe and from the Harvard School of Public Health. This traditional diet is based on grains, including rice, polenta, bulgur and pasta, as well as legumes and vegetables. It also includes fruits, cheeses, yogurt and nuts along with the optional choice of alcohol in moderation. Olive oil is given its own category as a major source of mono unsaturated fat, reflecting its important prominence in the region’s healthy cuisine. Daily physical activity, a factor contributing to health in the Mediterranean region and elsewhere, is also included on this and all Oldways pyramids.



The Asian Diet Concept

www.oldwayspt.org/pyramids/asian/p_asian.html

As Asian cuisine continues to become popular in diverse regions of the world, characteristics of Asian diets will continue to gain importance. In Japan and China, studies have found rates for blood pressure, heart disease, cholesterol and many types of cancer to be lower than those in the United States and the rest of the world. The centuries-old traditional Asian diet of rice, noodles, vegetables and fish is believed to be a significant contributor to the documented lower rates for chronic disease in these populations. The “Traditional healthy Asian Diet Pyramid,” developed in cooperation with scientists at Cornell University and the Harvard School of Public Health, incorporates these dietary patterns into the pyramid format. Sake, wine, beer, and other beverages with alcohol in moderation, as well as tea, are included as part of the pyramid because studies have shown that their consumption



may play an role in reducing heart disease risk and overall mortality.

The Latin American Diet Pyramid

www.oldwayspt.org/pyramidslatin/p_latin.html

“The Traditional Healthy Latin American Diet Pyramid,” released in 1996, is based on the traditional foods of Latin America. Unlike the Americanized versions that tend to be high in salt and fat, this pyramid presents many healthy eating options. It emphasizes daily consumption of beans, grains, tubers and nuts along with fruits and vegetables—staples in most Latin American and Caribbean regions. Daily physical activity is integrated into the pyramid structure in recognition of the scientific consensus on the importance of exercise in maintaining good health. Alcohol in moderation with meals is included as an option, and, as with other cultural pyramids, meats, sweets and eggs are at the very top of the pyramid, in the “occasionally” category to advocate a healthy and balanced lifestyle that can reduce the risk for several common diseases



The Vegetarian Diet Pyramid

www.oldwayspt.org/pyramids/veg/p_veg.html

The unique “Vegetarian Diet Pyramid,” released by Oldways at the end of 1997, serves as a model for healthy eating with meals built around vegetables, fruits, whole grains and legumes. The pyramid also emphasizes daily physical activity, water consumption and the option of “wine, beer and other alcohol” in moderation. The importance of this dietary concept, according to Oldways, is that it reflects the growing number of vegetarians and acknowledges the nutritional and health benefits of this type of diet. For example, the Dietary Guidelines for Americans have acknowledged such a diet as able to meet Recommended Dietary Allowances (RDA) for nutrients. While some vegetarians are prohibited from consuming meat and alcohol for religious reasons, all alcohol beverages are included as a choice because of the



potential risk reduction for heart disease and its cultural role as an accompaniment to vegetarian eating

III. A Sketch of The Scientific Evidence

The nutritional and medical significance of the traditional Oldways Dietary Pyramids was featured in "Medical News Perspectives" of the Journal of the American Medical Association in 2000. The author highlighted the importance of well-balanced and nutritious diets as a potential disease prevention measure that could be increasingly conveyed by physicians and healthcare providers to their patients. More recently, Greek and US scientists investigated the health effects of adherence to a Mediterranean Diet reported in the *New England Journal of Medicine* in 2003: "**Greater adherence to the traditional Mediterranean diet is associated with a significant reduction in total mortality.**" Coinciding with these acknowledgements, there is now a developing scientific consensus that, for many individuals, moderate wine, beer and spirits consumption is associated with a reduced risk of coronary heart disease and increased life expectancy which lead to the above featured alcohol-inclusive nutrition concepts.

In 1997, Sir Richard Doll, Emeritus Professor of Medicine at Oxford, outlined in the *British Medical Journal* "massive" evidence for the potential beneficial effect of alcohol in a review of the clinical data on alcohol and mortality. He concluded that "**the consumption of small and moderate amounts of alcohol**" leads to a one-third-risk reduction for vascular disease. He also acknowledged a reduction in total mortality in middle-aged and elderly men and women when they consumed wine, beer or spirits. More recently, world-renowned expert Dr. Arthur Klatsky from the US outlined the overwhelming scientific evidence in *Scientific American*. Dr. Klatsky has published many research studies on alcohol and health in leading scientific journals from the large-scale Kaiser Permanente cohort and in the recent article he wrote with respect to the most appropriate advice to the public, "**On one hand, mild to moderate drinking seems better for heart health than abstinence for select people. On the other hand, heavy drinking is clearly dangerous.**" Merely recommending abstinence is inappropriate health advice to people such as established light drinkers at high risk of CHD and at low risk of alcohol-related problems—which describes a large proportion of the population." Dr Klatsky along with other experts from around the world has advocated that health professionals make case-by-case evaluations based on individual and family histories. They also emphasize that the public should be entrusted with all the information on use versus misuse of alcohol so that they can make informed decisions themselves.

Authoritative findings from cohorts internationally, lead research experts to feature the option of moderation in each traditional Oldways Dietary Pyramid. Many peer-reviewed studies from Europe, Asia, Australia and the US have revealed potential benefits for moderately drinking adults in multi-ethnic populations. These studies find that moderate drinkers, especially consumers of 1-2 drinks (12g) daily, may lower their risk of heart disease significantly. Studies reporting certain health advantages for moderate drinkers include the Lyon Heart Study, the Copenhagen City Heart Study, the Australian Dubbo Study and the European Seven Country Study.

The Oldways experts, working with the Harvard School of Public Health, specifically considered findings from the ongoing Physicians' Health Study and the Nurses' Health Study. Analyzing data from 84,000 women in the Nurses' Health Study the effect of a combination of diet and lifestyle factors were assessed on the risk of CHD, Dr Meir Stampfer et al concluded, "**In this population of middle-aged women, those who did not smoke cigarettes, were not overweight, maintained a healthful diet described above, exercised moderately or vigorously for half an hour a day, and consumed alcohol moderately had an incidence of coronary events that was more than 80% lower than that in the rest of the population.**" At the same time, based on a prospective study of more than 89,000 men as part of the Physicians' Health Study, Harvard researcher Dr Michael Gaziano et al concluded, "**In summary, this study reveals the complex effect of alcohol consumption on various chronic diseases as reflected in the overall U-shaped relationship between light-to-moderate alcohol**

consumption and total mortality in men." The earlier results from the US government's funded National Health and Nutrition Examination Survey (NHANES) were also considered, which found that the risk for CHD is reduced for both men and women who drink moderately. Published in 1997 in the *American Journal of Epidemiology* it stated: "This analysis confirmed previous research showing that abstainers are at a greater risk for CHD than are most non abstainers and that a significant protective effect may be demonstrated with small amounts of alcohol." Along those lines, research published in *The New England Journal of Medicine* from American Cancer Society experts concluded, "In this middle-aged and elderly population, moderate alcohol consumption slightly reduced overall mortality."

At the same time, there are continuing concerns about alcohol consumption and breast cancer and women are recommended not to drink when pregnant , in line with governmental and public health positions in the US. Authoritative statements from public health groups such as the American Heart Association, the National Stroke Association and the American Dietetic Association acknowledge the scientific evidence pointing to potential benefits of moderation with respect to coronary heart disease and emphasize, "If you choose to drink, do so in moderation." A balanced summary position is reflected in the 1999 JAMA Patient Page on "Benefits and dangers of alcohol", which defines 'Moderate drinking as 1 or 2 drinks (12g) a day for men and 1 drink a day for women and those older than 65.' These messages are embodied in governmental positions in the US, UK, Australia and Canada.

The Oldways alcohol messages as reflected in the pyramids are, however, especially notable in that they emphasize consumption with or around mealtime, as research has shown that these and related cultural norms facilitate responsible drinking habits, may slow alcohol absorption and may counter potential harmful effects of fatty foods. For example, Dr. David Hanson, author of *Preventing Alcohol Abuse: Alcohol, Culture, and Control*, explains, "The cross-cultural evidence indicates that drinking abuse will be low in any group in which drinking customs, values and sanctions are clear.... and characterized by prescriptions for moderate drinking and proscriptions against immoderate drinking." Furthermore, several biochemical studies indicate that in addition to slowing down the absorption process, which keeps blood alcohol levels lower, moderate consumption during or around mealtime may have favourable effects on lipid profiles and atherogenesis. One 1998 study published in the *American Journal of Clinical Nutrition*, suggested "ethanol may reduce cardiovascular risk by modulating vascular muscle growth during the postprandial period." Research continues, but it appears clear that healthy dietary patterns are inversely related with low rates of chronic diseases. This has been specifically confirmed in the ongoing Seven Country Study which reported in 1999 that animal-food groups were directly correlated with CHD mortality while vegetable-food groups, as well as fish and alcohol were inversely correlated.

In summary, in line with the developing scientific consensus, public health and governmental positions, the Oldways pyramids stress moderation and underscore the importance of an overall healthy meal and lifestyle. Consumption is not recommended for non-drinkers or those who may have any health contraindications and consumers are always advised to consult with their healthcare providers. For selected references and authoritative statements on moderate drinking and health, please visit the Gateway to Sensible Drinking and Health via www.aim-digest.com

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Consumption for those adults who choose to enjoy moderation as part of an overall balanced lifestyle. The reader is urged to obtain full

l references and to visit review other governmental and non-governmental websites for more information on alcohol, health and society e.g.

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