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A Health Psychology Perspective on the Recent Medical Literature of Cardiovascular Disease

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New blood pressure guidelines publicized last spring (Chobanian et al., 2003) made waves in the national media. A panel of experts convened by the National Heart, Lung, and Blood Institute determined that blood pressure readings as low as 120 over 80, long thought to be a healthy level, actually represent "prehypertension." In addition to the 50 million Americans already estimated to have high blood pressure, 45 million more are now considered at increased risk for cardiovascular diseases and premature death.

Many Americans are undoubtedly concerned by these new guidelines. As a psychotherapist specializing in health issues, I have interviewed numerous patients at relatively high risk for cardiovascular disease. Although aware that lifestyle modification is necessary to decrease their chances of heart attack or stroke, many are discouraged by the prospect of making large changes.

In actuality, it may be a lot easier than they think. Several recent medical studies demonstrate that even surprisingly small changes in lifestyle may significantly reduce the risk of cardiovascular disease. For example, the Center for Disease Control and Prevention (CDC) recommends that adults exercise 5 times per week for 30 minutes (CDC, 2003), and the Institute of Medicine recommends a full hour (Associated Press, 2003). But a study published last May in the *Archives of Internal Medicine* of the American Medical Association revealed that those who exercised as little as one to two hours per week decreased their risk of heart disease by a full 40% (Rothenbacher et al., 2003; Ishikawa-Takata et al., 2003). Even those who exercised less than one hour per week cut their risk of heart disease by 15%, compared with those who did not exercise at all.

Furthermore, while scientists have long known that moderate drinking also may be effective in reducing the risk of heart attacks, probably by raising "good cholesterol" levels (High Density Lipoprotein, HDL) and by inhibiting blood clots, a recent study published in the *New England Journal of Medicine* emphasized just how sensitive this relationship may be (Mukamal et al., 2003). Consumption of even half a drink every other day substantially reduced chances of a heart attack in men. In fact, even those who had a drink only once or twice a week saw their chances of a heart attack drop by 16%. Evidently, the risks of cardiovascular disease, the number one killer of Americans, may be reduced by something seemingly

trivial – half an ounce of liquor. And a study presented at the Eighteenth Annual Scientific Meeting of the American Society of Hypertension in May found that moderate drinkers have increased elasticity of both large and small arteries as well as lower heart rates, both signs of cardiovascular health (WebMD, 2003).

These results follow closely on the heels of yet another study, published in the *Journal of the American Medical Association*, also showing the cardiovascular benefits of something relatively minor. Previous research had suggested that fish meals, if eaten several times each week, may be advantageous to health. Yet authors of the new study report that even one serving of fish, as infrequently as once or twice a month, reduced the risk of stroke in men by a whopping 43% (He et al., 2002; Dallongeville et al., 2003).

At other times, it may be the omission of a very small dietary component that is surprisingly beneficial. Unlike foods with cholesterol or sodium, for example, where moderate amounts can be safely enjoyed, researchers at the Institute of Medicine have found that consumption of any "trans fat" whatsoever seems to increase the risk of heart disease (Abboud and Callahan, 2002). Used in certain brands of a variety of foods, trans fat provides enhanced taste, a longer shelf life, and potentially harmful health effects. Indeed, the Food and Drug Administration (FDA) has newly mandated that manufacturers of all packaged foods label their trans fat content (FDA, 2003). As such, switching to a brand of snack food that does not contain trans fat also seems a simple way to improve cardiovascular health.

The suggestion that very small lifestyle changes may have profound effects is intriguing. Health psychologists might suggest such small resolutions for change, as these are easiest to initiate, most likely to be maintained, and now recognized as clinically valuable in their own right. Perhaps taking a walk once a week or eating fish once a month is an easy way to start. Although still currently a hot debate, a glass of wine once a week might also be appropriate.

Finally, as scientific research further refines our knowledge of what is good for us and what is not, it becomes critical to pay closer attention to our lifestyle choices, even for those with relatively low risk of cardiovascular disease. No longer can we assume that a little bit of

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something bad will not hurt, and no longer can we defend our apathy by thinking that only large resolutions make a difference anyway. A little bit of the right thing does make a difference, and a little bit of the wrong thing can hurt. As for the current recommendations: exercise and alcohol at least once a week, fish once a month, and trans fat never.

REFERENCES

- Abboud, L. and Callahan, P. (2002) Food industry gags at proposed label rule for trans fats. *The Wall Street Journal* B1, B4.
- Associated Press, news release, August 14, 2003.
- Center for Disease Control and Prevention. 2003. Recommendations for Physical Activity. <http://www.cdc.gov/nccdphp/dnpa/physical/recommendations/index.htm>, (accessed 9/7/03).
- Chobanian, A.V., Bakris, G.L., Black, H.R., Cushman, W.C., Green, L.A., Jones, D.W., Materson, B.J., Oparil, S., Wright, J.T., and Roccella, E.J. (2003) The seventh report of the joint national committee on prevention, detection, evaluation, and treatment of high blood pressure. *JAMA* 289:2560-2572.
- Dallongeville, J., Yarnell, J., Ducimetiere, P., Arveiler, D., Ferrieres, J., Montaye, M., Luc, G., Evans, A., Bingham, A., Hass, B., Ruidavets, J.-B., and Amouyel, P. (2003) Fish consumption is associated with lower heart rates. *Circulation* 108:820-825.
- Food and Drug Administration (2003) FDA acts to provide better information to consumers on trans fat. <http://www.fda.gov/oc/initiatives/transfat>, (accessed 9/7/03).
- He, K., Rimm, E.B., Merchant, A., Rosner, B.A., Stampfer, M.J., Willet, W.C., and Ascherio, A. (2002) Fish consumption and risk of stroke in men. *JAMA* 288:3130-3136.
- Ishikawa-Takata, K., Ohta, T., and Tanaka, H. (2003) How much exercise is required to reduce blood pressure in essential hypertensives: A dose response study. *Am. J. Hypertension* 16:629-633.
- Mukamal, K.J., Conigrave, K.M., Mittleman, M.A., Camargo, C.A., Stampfer, M.J., Willet, W.C., and Rimm, E.B. (2003) Roles of drinking pattern and type of alcohol consumed in coronary heart disease in men. *N. Eng. J. Med.* 348:109-118.
- Rothenbacher, D., Hoffmeister, A., Brenner, H., and Koenig, W. (2003) Physical activity, coronary heart disease, and inflammatory response. *Arch. Intern. Med.* 163:1200-1205.
- WebMD, news release, May 15, 2003.

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