

Question : JM writes “I had a Roux-en-Y gastric bypass surgery last year... My surgeon ... advises his patients to not drink alcohol after the surgery. I understand that there are higher-than-average risks for addiction, but I've never been much of a drinker. Also I understand that the alcohol has a faster initial impact on post bariatric surgery patients. I would only drink wine at home in the evenings so I don't think there would be a risk for driving, etc. What are your thoughts about whether I could benefit from wine? Should I abstain altogether or are the health benefits enough that I should consider it?”

Answer : JM- Believe it or not, there are only 2 studies in the medical literature that address alcohol metabolism in patients after bariatric (weight loss or gastric bypass) surgery. One study evaluated blood alcohol concentration (BAC) in 12 women who underwent bariatric surgery 3 years or more prior vs. a control group of 12 women of similar age and body mass index (BMI). Women who had undergone bariatric surgery were found to have statistically significantly higher maximum BAC as well as BAC at 10 and 20 minutes after ingesting the same amount of alcohol per kg of body weight (pure ethanol that was mixed with orange juice). There were no differences in the groups at 30 minutes and at subsequent 10-minute intervals up to 3.5 hours after ingestion. The authors concluded that alcohol is more rapidly absorbed and has a higher maximum BAC in women who underwent bariatric surgery. Note that 20% of ethanol is metabolized in the stomach but this is decreased in patients after bariatric surgery. This is due to the absence of normal gastric emptying, smaller stomach mucosa surface area, and less alcohol dehydrogenase (the major enzyme responsible for alcohol metabolism). Limitations of this study include: small numbers; subjects were fasting (This increases the studied parameters.) and; pure ethanol (not wine) was consumed. Our colleague and friend, Dr. John Morton et al. at Stanford University Medical Center, performed the second study. They looked at 17 control and 19 post-gastric bypass subjects who consumed 5 oz. of red wine each (same varietal, vintage, alcohol content). They measured alcohol breath levels and found that gastric bypass patients had greater peak alcohol levels and longer time intervals needed to clear alcohol but no difference in subjective symptoms. Limitations of this study include small numbers. Although the above data is compelling that alcohol metabolism is altered in patients after bariatric surgery, we think more studies with greater power need to be done to confirm this hypothesis and explore the mechanism(s) of action. It is unclear if there are higher than average risks of ethanol addiction in patients who have undergone bariatric surgery. In one study that analyzed the charts of 298 women in a weight management program undergoing a pre-bariatric surgery evaluation, researchers concluded that there was an inverse relationship between BMI and alcohol consumption, i.e., the more obese a patient was, the less alcohol she consumed. Researchers postulated that overeating might compete with alcohol for brain reward sites. In a recent abstract (The WineDoctors are awaiting publication of the entire journal article for analysis.), researchers from the University of North Dakota sent patients who had undergone bariatric surgery (numbers of patients unspecified) the Post-Bariatric Surgery Appearance Questionnaire. Results indicated that a small (again, number not specified) number of respondents developed alcohol abuse or dependence since the surgery. Therefore, in our opinion, there is very limited, if any data that addresses whether or not post-gastric bypass

surgery patients are at increased risk of developing alcohol addiction or dependence. Lastly, although moderate (Please see “The Doctors are in: How much can I drink? Dated Nov 10, 2007) alcohol (not just wine, it seems) consumption has cardiovascular health benefits and appears to decrease all-cause mortality and may incur other health benefits, we do not recommend initiating alcohol (wine) consumption for its health benefits.