VALLEY MEDICAL GROUP
Prevention & Medical Care To Help You Live Better, Longer.

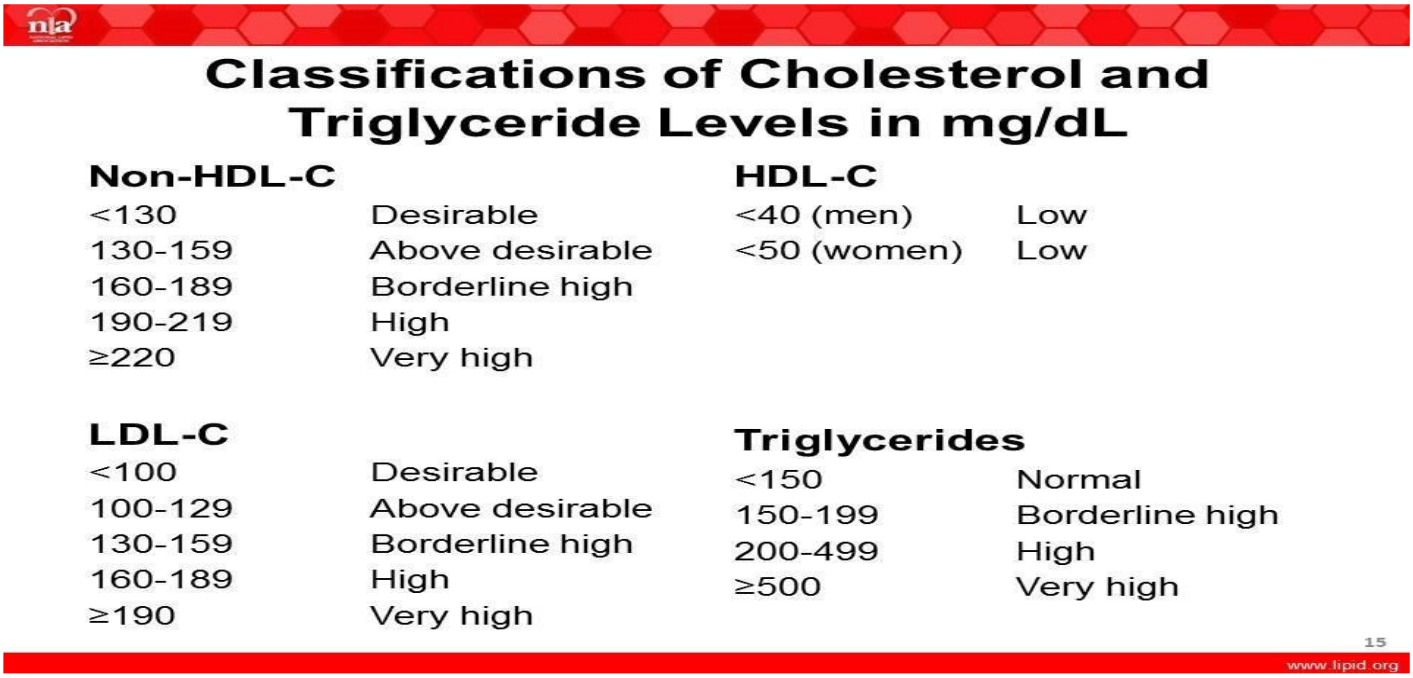
Clinical Champion Update

Date: 3/28/22 *Subject: Hyperlipidemia and Lifestyle*

Lowering Lipids with a Heart-Healthy Lifestyle

Heart disease has been the leading cause of death in the United States except during the flu pandemic of 1918-1920. This was even true during 2020, when deaths due to heart disease outnumbered those due to COVID-19 by 345,000.

"Atherosclerosis begins early in life and progresses silently, so a heart-healthy lifestyle, universal screening, and lipid lowering when indicated should be encouraged life-long," according to the National Lipid Association (NLA, 2018). Epidemiologic studies between 1955 and 1985 and clinical trials between 1985 and 2015 all point to the causal relationship between rising cholesterol and increasing ASCVD risk. LDL is a good predictor of ASCVD risk and is the primary target of lipid-lowering therapy. Non-HDL cholesterol (total cholesterol minus HDL, a measure of the cholesterol in all atherogenic particles) is a better predictor but has not been the focus of as many randomized controlled trials so is considered a secondary target of therapy.



It's worth noting that a desirable LDL level is less than 100, not – as frequently stated – less than 130. However, a desirable non-HDL level is less than 130. These are not equivalent numbers for most patients.

Treatment Goals for Non-HDL-C, LDL-C, and Apo B in mg/dL

Risk Category	Treatment Goal		
	Non-HDL-C	LDL-C	Apo B
Low	<130	<100	<90
Moderate	<130	<100	<90
High	<130	<100	<90
Very High	<100	<70	<80

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www.lipid.org

Effective treatment for prevention of heart disease begins with optimizing diet and lifestyle factors. This is also the foundation of secondary prevention, along with medications and any needed surgical interventions. Lifestyle behaviors have a significant impact on body weight, insulin resistance, and blood pressure as well as cholesterol levels.

We need to emphasize a heart-healthy lifestyle for our patients of all ages. The healthiest diets focus on whole grains, vegetables, fruits, legumes, nuts, and seeds and are low in added sugars and sodium; they may include lean proteins and small amounts of liquid vegetable oils if desired. Exercise (aiming for at least 30 minutes five to seven days per week) is significant as well. Tobacco and excessive alcohol should be avoided.

TABLE. **Top 10 dietary strategies for atherosclerotic cardiovascular risk reduction**[81]

1. Incorporate nutrition screening into medical visits to assess dietary quality and determine need for referral to an RDN
2. Refer patients to an RDN for medical nutrition therapy, when appropriate, for prevention of ASCVD
3. Follow ACC/AHA Nutrition and Diet Recommendations for ASCVD Prevention and Management of Overweight/Obesity, Type 2 Diabetes (T2DM) and Hypertension
4. Include NLA nutrition goals for optimizing LDL-C and non-HDL-C and reducing ASCVD risk
5. Utilize evidence-based heart-healthy eating patterns for improving cardiometabolic risk factors, dyslipidemia and ASCVD risk
6. Implement ACC/AHA/NLA nutrition and lifestyle recommendations for optimizing TG levels
7. Understand the impact of saturated fats, trans fats, omega-3 and omega-6 polyunsaturated fats and monounsaturated fats on ASCVD risk
8. Limit excessive intake of dietary cholesterol for those with dyslipidemia, diabetes and at risk for heart failure
9. Include dietary adjuncts such as viscous fiber, plant sterols/stanols and probiotics
10. Implement AHA/ACC and NLA physical activity recommendations for the optimization of lipids and prevention of ASCVD

ACC, American College of Cardiology; AHA, American Heart Association; ASCVD, atherosclerotic cardiovascular disease; LDL-C, low-density lipoprotein cholesterol; HDL-C, high-density lipoprotein cholesterol; NLA, National Lipid Association; RDN, registered dietitian nutritionist; TG, triglycerides.

American Society of Preventive Cardiology, 2020

Although a great deal of appropriate dietary information is available on line for practitioners who feel comfortable discussing it with their patients, we have a wonderful in-house resource in our registered dietitians, Margie Sobil (GHC and AMC) and Diane Alpern (EHC and NHC). Both are available for outpatient nutrition appointments with patients as well as for integrated nutrition in family practice each week.

Integrated nutrition is ideal for patients whose insurance doesn't cover nutrition visits for hyperlipidemia (e.g., Medicare).

Please consider calling on Diane or Margie to work with your patients whose cholesterol levels are rising or already higher than optimal.

--Lisa Appleton, FNP, *clinical champion for hyperlipidemia and lifestyle medicine*