

What is Required for Optimal Lipid Management

Given the risks associated with elevated lipid levels, optimal lipid management is of great importance. Prof. Dr. Isabella Sudano, head of the hypertension, dyslipidemia, and smoking cessation clinic, Department of Cardiology, University Hospital of Zurich; and PD Dr. Konstantinos Koskinas, Preventive Cardiology, University Clinic for Cardiology, Inselspital Bern, at the Cardiology Review Course Zurich 2026.

To achieve the best possible lipid management, according to Prof. Sudano's recommendation, it is always beneficial to be familiar with the current European and American guidelines, because these guidelines provide a summary of the available literature at the time. For example, the new American guidelines for 2026 on the primary prevention of dyslipidemia (1) include recommendations for a healthy lifestyle from childhood to adulthood in order to reduce the risk of dyslipidemia and subsequent atherosclerosis-related cardiovascular disease (ASCVD). According to Prof. Sudano, this is because it is the cumulative lipid burden that counts

and not just the current elevated lipid level. Furthermore, there are recommendations regarding when patients should be referred to a lipidologist. These criteria include diagnosed or suspected familial hypercholesterolemia, ASCVD or high risk of ASCVD, cases of inherited hyperlipidemia requiring genetic testing, pregnant or breastfeeding women with dyslipidemia, cases of severe or extremely high primary triglyceridemia, and potential candidates for olezarsen, evinacumab, lomitapide, or lipoprotein apheresis (1).

Cardiovascular risk (2), which can be calculated using the SCORE2/SCORE2-OP charts, must be correctly assessed. According to the speaker, the risk assessment can also be done using the AGLA score, provided the patients are of Swiss origin. For patients from abroad, the SCORE2/-OP with risk calculations from other countries is more suitable. This is particularly the case for individuals who have only been in Switzerland for a short period of time or who have maintained their original lifestyle.

In addition, there are factors that can further increase cardiovascular risk. These include risk modifiers such as a positive family history, lack of exercise, obesity, psychiatric disorders, sleep apnea, as well as persistently elevated high-sensitivity C-reactive protein over 2 mg/l and elevated lipoprotein (a) over 50 mg/dl (105 nmol/l) (2).

Lifestyle changes are essential for every patient with dyslipidemia. Statins or other lipid-lowering drugs are not a substitute for a healthy lifestyle. In terms of medication, statins are the best available option with the strongest evidence regarding efficacy on morbidity and mortality. According to Prof. Sudano, all other lipid-lowering agents, with the exception of bempedoic acid, have been tested against statins as the baseline comparison. Therefore, according to the AGLA and international guidelines, lipid-lowering therapy should be initiated with statins (3). If a patient is intolerant to statins, bempedoic acid should be used (2).

The expert notes that it is also important to monitor the effect of lipid-lowering therapy and adjust the treatment if necessary. During a follow-up appointment, kidney and liver function parameters as well as creatine kinase levels should be checked.

Are There Alternatives to Medication?

Dietary supplements are popular with patients, but they are not suitable as a substitute for lipid-lowering medication. This was demonstrated by a study that investigated the lipid-lowering effects of six dietary supplements. In the

Even Small Lifestyle Changes Can Make a Big Difference

New study results from a prospective cohort analysis involving 53,242 participants from the UK Biobank show that even small, combined improvements in sleep, diet, and physical activity can reduce the risk of serious cardiovascular events such as heart attacks, strokes, and heart failure.

Sleeping 11 minutes longer each day, engaging in moderate to vigorous physical activity for 4.5 minutes longer, and eating a quarter of a cup (approximately 40 g) more vegetables was associated with a 10% lower risk of serious cardiovascular events.

An optimal combination of behaviors consisted of eight to nine hours of sleep per night, at least 42 minutes of moderate to vigorous physical activity per day, and a moderate score for dietary quality. Compared with individuals with the least optimal health profile, this combination was associated with a 57% lower risk of serious cardiovascular events.

According to the lead author's commentary, smaller, combined behavioral changes are likely to be easier to implement and more sustainable than a major change in a single behavior to achieve the same health benefits. vh

Koemel NA et al.: Combined variations in sleep, physical activity, and nutrition and the risk of major adverse cardiovascular events. *Eur J Prev Cardiol*. Published online 23 March 2026. doi:10.1093/eurjpc/zwag141

study, 190 participants with high cardiovascular risk were randomly assigned in a simple-blinded trial to receive either rosuvastatin (5 mg), a placebo, fish oil, cinnamon, garlic, turmeric, plant sterols, or red yeast rice.

While rosuvastatin significantly reduced low-density lipoprotein cholesterol (LDL-C) levels by 38% after one month, turmeric reduced them by 1.3%, fish oil by 3.4%, plant sterols by 4.4%, and red yeast rice by 6.6%. Garlic increased the LDL-C levels by 5.5% (4). These results were a major factor in the updated guidelines advising against the use of dietary supplements or vitamins without evidence of a significant reduction in LDL-C levels for the risk reduction of atherosclerosis-related cardiovascular diseases (1,2).

Lipoprotein (a) (Lp[a]) – Why Measure It?

Lp(a) is a plasma lipoprotein and consists of two apolipoproteins: apolipoprotein B-100 and apolipoprotein (a). Lp(a) is very similar in structure to LDL-C. It has a proatherogenic and prothrombotic effect on blood vessels and is an independent risk factor for cardiovascular diseases. The plasma level of Lp(a) is genetically determined. PD Dr. Koskinas explained that from a concentration of 30 mg/dl, cardiovascular risk begins to rise, and levels above 50 mg/dl (105 nmol/l) are considered elevated. It is presumed that around 20% of the population have elevated Lp(a) levels (2).

Lp(a) further increases the cardiovascular risk in patients with elevated LDL-C levels. For example, if a patient in primary prevention has moderately elevated LDL-C and their risk profile indicates a moderate 10-year cardiovascular risk (2–10%) according to SCORE2, pharmacological therapy is not strictly necessary. A lifestyle adjustment is sufficient in this case. However, if the additional measurement of Lp(a) reveals an elevated level, the situation changes. The patient is subsequently reclassified into a higher risk category and could then be considered to be at high risk, consequently

dropping their LDL-C target level from 2.6 to 1.8 mmol/l, indicating that pharmacological lipid-lowering therapy would be recommended.

Consequences of an Elevated Lp(a) Level

With an Lp(a) level of 150 mg/dl (350 nmol/l), the lifetime risk of a cardiovascular event increases two- to threefold compared to individuals with an otherwise identical risk profile but a low Lp(a) level of 7 mg/dl (16 nmol/l) (5).

The consequence of an elevated plasma Lp(a) level in primary prevention is earlier and more intensive lipid-lowering therapy, as well as intensive management of all other existing cardiovascular risk factors. This applies at least until specific therapies, which are currently in Phase III trials, become available. □

Valérie Herzog

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