

Table 1 Life's Essential Eight¹⁸

Behaviors	Metrics
Healthy eating pattern – optimal score achieved with high adherence to Mediterranean- or DASH-style eating pattern	BMI – optimal score achieved with BMI <25 kg/m ²
Physical activity – optimal score achieved with ≥150 minutes/week of moderate or 75 minutes/week of vigorous physical activity	Blood lipids – optimal score achieved with non-HDL-C <130 mg/dL
Nicotine exposure – optimal score achieved with self-reported “never smoker”; encourage patients to seek assistance for cessation, as needed	Fasting blood glucose and HbA1c – optimal score achieved with no history of diabetes and FBG <100 mg/dL or HbA1c <5.7%
Sleep health – optimal score achieved with self-reported 7 to <9 hours of sleep each night	Blood pressure – optimal score achieved with systolic and diastolic blood pressure <120/<80 mm Hg, respectively
Abbreviations: ASCVD=atherosclerotic cardiovascular disease; BMI=body mass index; DASH=Dietary Approaches to Stop Hypertension; FBG=fasting blood glucose; HbA1c=hemoglobin A1c; non-HDL-C=non-high-density lipoprotein cholesterol	

Dietary patterns associated with reduced ASCVD risk

A healthy dietary pattern beneficially impacts atherogenic lipoprotein levels, as well as other ASCVD risk factors.^{4-8,19} The foods and components of a healthy dietary pattern can mitigate ASCVD risk by favorably affecting numerous metabolic pathways and cellular processes, including those that affect the atherothrombotic process, such as atherosclerotic plaque initiation and progression, plaque instability and rupture, and thrombosis,²⁰ although the mechanistic pathways are only partially understood.²¹ Emerging research on the influences of dietary patterns and food components on metabolomics, lipidomics, and the microbiome may increase the understanding of the complex interaction of diet and ASCVD risk.^{21,22} Thus, nutrition interventions for specific dyslipidemias should be incorporated into an overall healthy dietary pattern.

Healthy dietary patterns provide cumulative exposures to combinations of foods, nutrients, and bioactive compounds associated with cardiometabolic health benefits when consumed at appropriate levels of energy intake,²³⁻²⁵ as well as minimize exposure to harmful dietary components. Consequently, they provide greater CV and other health benefits than typically achieved with single nutrient substitutions, which is why healthy eating patterns are emphasized in contemporary dietary recommendations.^{4-8,19} Several healthy dietary patterns have been described in recent Dietary Guidelines for Americans¹⁹ and are included in nutrition recommendations from scientific organizations, such as the AHA,⁶ European Society of Cardiology,^{5,8} and European Atherosclerosis Society.⁵ The recommended dietary patterns include the Mediterranean, Dietary Approaches to Stop Hypertension (DASH), healthy vegetarian (including vegan), and the Healthy U.S.-Style dietary patterns.

Each dietary pattern has distinct characteristics but all share commonalities (Fig. 1), including an emphasis on whole, unprocessed, or minimally processed, foods with high intakes of fiber-rich components, such as fruits and vegetables, whole grains, nuts, and seeds. These dietary patterns

also emphasize selection of healthy protein sources, such as fish and seafood, plant-based proteins (e.g., nuts, seeds, legumes/pulses), and lower fat animal proteins (meats, poultry, dairy, eggs), as well as non-tropical, liquid plant oils in place of solid (more saturated) fats. Healthy dietary patterns are low in highly processed foods, including processed meats, refined grains, and foods/beverages with added sugars and salt, and are low in foods with high contents of saturated fatty acids (SFAs) and *trans* fatty acids (TFAs).^{4-8,19,26} High diet quality, which is associated with reduced ASCVD risk, is emphasized in each of the recommended dietary patterns.²⁷ All individuals should be informed about how to implement a healthy eating pattern that aligns with their personal preferences, budget constraints, and cultural traditions. For individuals who have dyslipidemia, personalized counseling is important and recommended.^{4-6,8,28} Personalized medical nutrition therapy for dyslipidemia management provided by registered dietitian nutritionists (RDNs) is clinically beneficial and cost effective.²⁹⁻³¹ Patient education handouts for the recommended healthy dietary patterns and specific nutrition interventions are available on the NLA Clinician's Lifestyle Modification Toolbox webpage (www.lipid.org/clmt).

Lipoprotein lipid targets of nutrition interventions and other lifestyle therapies

The targets of nutrition and other lifestyle interventions for ASCVD risk reduction are mainly circulating levels of atherogenic particles, i.e., Apo B-containing lipoproteins. Since each potentially atherogenic lipoprotein particle [LDL, which includes intermediate density lipoprotein (IDL), very-low-density lipoprotein (VLDL), chylomicron remnants, and Lp(a)] contains a single molecule of Apo B, the concentration of Apo B is a direct indication of the circulating burden of atherogenic particles.¹¹ Because Apo B is not routinely measured clinically in the U.S., both LDL-C and non-HDL-C are measured surrogates for Apo B-containing lipoproteins. The non-HDL-C concentration is comprised of cholesterol carried by all Apo B-containing lipoprotein particles and correlates more strongly than LDL-C with the Apo