



REVIEW ARTICLE

Enhancing Cardiovascular Health Outcomes: The Role of Digital Health in the 8 Essential Life Factors.

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ABSTRACT

This review paper investigates digital health applications designed to support each component of the American Heart Association's "Life's Essential 8" framework, which aims to enhance cardiovascular health management. The methodology involved a comprehensive review of over one hundred applications available on both the Apple Store and Google Play, with a focus on those that promote healthy behaviors essential for maintaining cardiovascular health. A minimum of three to five applications were selected for each of the eight essential areas, ensuring compatibility with both Android and iPhone devices.

Stringent selection criteria were applied, prioritizing applications that offer multiple language translations to accommodate diverse user needs and exclusively including those with positive user feedback, specifically ratings between 3 to 5 stars. After the selection process, the availability of each chosen application was confirmed for seamless access on both platforms. The findings stress the importance of integrating digital health tools into everyday lifestyle changes to improve patient engagement, adherence to health recommendations, and overall cardiovascular health outcomes. This paper ultimately highlights the potential of digital health solutions in facilitating the management of cardiovascular risk factors and fostering healthier lifestyles.

Introduction

Cardiovascular diseases (CVDs) remain the leading causes of death globally, significantly contributing to health loss and overwhelming healthcare costs.¹ Among these, ischemic heart disease (IHD) and stroke are the primary causes of global mortality and major factors in disability.² Effective management of cardiovascular risk factors—such as hypertension, dyslipidemia, and diabetes—along with lifestyle modifications, including a healthy diet, regular physical activity, and smoking cessation, is crucial for preventing adverse cardiovascular events.³ To address this pressing public health crisis, the American Heart Association (AHA) has introduced its "Life's Essential 8" framework,⁴ which outlines core health factors and lifestyle behaviors essential for maintaining and improving cardiovascular health. These essentials include maintaining a healthy diet, engaging in regular physical activity, achieving and maintaining a healthy weight, managing blood lipids, controlling blood pressure, reducing blood glucose levels, avoiding tobacco use, and promoting psychological well-being. To effectively implement these lifestyle changes, healthcare professionals can access digital platforms to facilitate engagement and enhance patient health outcomes. Digital health solutions—including mobile applications, telemedicine platforms, wearable devices, and online support communities—can significantly improve patient engagement and adherence to healthy behaviors. According to,⁵ digital devices have the potential to enhance the accuracy of diagnostics and treatment delivery while empowering patients to take greater control over their health and make better-informed decisions. These technologies enable continuous monitoring, provide personalized feedback, and grant access to extensive resources that support patients in managing their cardiovascular risk factors.

Digital health applications, such as PreventiPlaque5, enhance patient engagement and promote behavior change by integrating personalized health information with goal-oriented tracking of lifestyle habits, utilizing real-time ultrasound images of carotid plaque burden as critical health data³. Over time, these interventions are likely to foster a more active patient role in health management, leading to improved health outcomes and a reduction in the incidence of serious cardiovascular events. This review paper will explore various digital health interventions designed to enhance each of the eight Essential Life Factors for individuals at risk of or living with cardiovascular conditions.

Methodology

The author conducted a thorough review of at least one hundred applications available on both the Apple Store and Google Play, focusing on those designed to support each component of the American Heart Association's "Life's Essential 8" framework. From this comprehensive review, the author selected a minimum of three to five applications for each of the eight essential areas. To ensure wide accessibility, only applications compatible with both Android and iPhone devices were considered. The selection criteria were stringent, encompassing applications that offer multiple language translations to cater to diverse user needs. Additionally, only apps that maintained positive user feedback were included,

specifically those with ratings ranging from 3 to 5 stars. Following this selection process, the author confirmed the availability of each chosen application for download on both platforms to ensure users have seamless access to these tools for managing their health effectively.

Discussion/Analysis

The first essential factor—avoiding tobacco use—is critical for cardiovascular health. To reduce or eliminate tobacco and nicotine use and lower the risk of heart disease and stroke, applications such as QuitNow, Kwit, Smoke Free, and My QuitBuddy were reviewed from the Apple Store and Google Play to assess their availability and compatibility with other devices. The author confirmed that these tools are available for free or at a minimal cost. Digital tools can be cost-effective, which may lead to savings for the healthcare system⁶. Digital health interventions can play a vital role in smoking cessation. mHealth tools have proven effective for various groups of smokers, including pregnant women, patients with chronic obstructive pulmonary disease, individuals with mental illness, and the general population. Furthermore, online support communities create safe spaces for individuals to share experiences and strategies, fostering accountability among users. According to⁷, smoking cessation is a complex and challenging endeavor. However, through innovative approaches, advanced technologies, and collaborative efforts, significant progress can be made in reducing smoking rates, supporting cessation efforts, and alleviating the global burden of smoking-related diseases.

The second essential is nutrition—helping individuals maintain well-balanced meals throughout the day to optimize heart and brain function. Nutrition apps such as MyFitnessPal, Cronometer, FatSecret, and Lifesum were reviewed. The selected applications offer favorite recipes and generate shopping lists to streamline the cooking process. Some even provide telenutrition services that facilitate virtual consultations with registered dietitians, delivering personalized dietary recommendations and ongoing support. The second essential factor—a healthy diet—is equally pivotal for overall health. Digital health interventions can effectively modify individuals' attitudes and behaviors, enhancing their belief in their ability to initiate change⁸. The authors highlight that these interventions present significant opportunities to customize strategies for disadvantaged populations by providing bite-sized information in clear, accessible language⁸. Digital health technologies can leverage nutrition tracking to improve dietary habits. Users can log their food intake and receive immediate feedback on their nutritional choices, fostering awareness and promoting healthier decision-making.

Addressing physical activity is the third essential factor in promoting overall health. Commonly used applications for tracking physical activity include Strava, Fitbit, Nike Run Club, and MapMyRun. These apps monitor users' physical activity levels, heart rates, and even sleep, providing real-time data that incentivizes movement. Additionally, virtual fitness classes offer accessible opportunities for engagement in structured physical activity, helping individuals establish and maintain

exercise routines. The advantages of digital health interventions include reliability, real-time capabilities, and personalized customization, all of which can effectively support physical activity.⁹

The fourth essential factor is weight management. Commonly used applications for this purpose include Noom, Weight Watchers, Dietbet, and Fooducate. These apps enable users to track their food intake while promoting the behavioral changes necessary for sustainable weight loss. Digital health tools play a crucial role in assisting patients to achieve and maintain a healthy weight. While weight loss can be achieved through various methods, sustaining that weight loss over the long term poses significant challenges, as weight regain is common.¹⁰ emphasize that long-term weight management is particularly difficult due to complex interactions among biological, behavioral, and environmental factors related to obesity. Researchers found that the use of mobile applications for weight management led to significant reductions in body weight, body mass index (BMI), and body fat percentage compared to control groups.¹¹ Additionally, online support groups, such as Weight Watchers, facilitate community-based approaches to weight management, providing peer motivation and accountability. Evidence-based digital health interventions have gained increasing attention as promising strategies for addressing the obesity epidemic through effective population health management.¹²

Effective management of blood pressure and cardiovascular health is the fifth essential factor in the AHA framework. Several applications are commonly used for tracking blood pressure, with selected options for this review including Blood Pressure Companion, Blood Pressure Tracker SmartBP, iHealth, and Cardiio. These apps offer features for tracking blood pressure, analyzing trends, and facilitating communication with healthcare providers, allowing users to manage their cardiovascular health effectively. Users can easily share their readings with healthcare providers, enabling real-time adjustments to their management plans. Accurate diagnosis is the crucial first step in managing hypertension, followed by implementing lifestyle modifications and pharmacological treatments to lower blood pressure and reduce the risk of cardiovascular disease¹³. Digital management of hypertension has the potential to enhance patient engagement while improving clinical efficiency and outcomes¹⁴. Wearable technologies, such as smartwatches, fitness trackers, and connected blood pressure monitors, are gaining popularity for their ability to continuously monitor various physiological parameters, including heart rate, physical activity, sleep patterns, and blood pressure¹⁵. Among these technological innovations, telemedicine and remote patient monitoring have become critical components, providing unprecedented opportunities to enhance accessibility, improve patient outcomes, and optimize healthcare resource utilization¹⁶. Moreover, behavioral modification apps that promote lifestyle changes through exercise and diet can further assist individuals in lowering their blood pressure levels.

The sixth essential factor—cholesterol management—is vital for cardiovascular health. Useful applications

include My Heartlet, Nutritionix, and LDL: Cholesterol Tracker. These applications support individuals seeking to manage their cholesterol levels through tracking and lifestyle modifications. Telehealth consultations provide regular opportunities for patients to discuss their lipid levels and receive tailored advice from healthcare providers. Foodsmart, a digital nutrition and meal planning platform, aims to make healthier eating achievable and sustainable for the general population while addressing prevalent barriers to nutritious eating¹⁷. Lifestyle modifications play a significant role in managing high cholesterol, as highlighted by¹⁸. The authors emphasize that essential changes include reducing saturated fat intake and increasing physical activity, recommending at least 40 minutes of exercise three to four times per week¹⁸.¹⁷ study demonstrated successful digital intervention aimed at modifying users' meal planning and food ordering behaviors, resulting in significant improvements in cholesterol levels.

The seventh essential factor emphasizes the importance of reducing blood glucose levels. Blood glucose monitoring apps selected for review, such as MySugr, Glooko, and Diabetes:M, can enhance diabetes monitoring and management. These applications support individuals in managing their blood glucose levels through tracking, education, and lifestyle changes, allowing them to log their glucose readings and analyze trends over time. Additionally, diabetes apps address various self-management tasks, including blood glucose monitoring, medication or insulin dosing, acquiring general health education, and tracking nutrition or physical activity¹⁹. Digital health technologies can facilitate effective management of glucose levels for individuals with diabetes or prediabetes, thereby supporting cardiovascular health. Understanding one's current glucose readings and recognizing patterns can empower individuals with diabetes to adjust their food intake, physical activity, and medications to meet their glycemic goals²⁰. Research indicates that digital diabetes management effectively improves blood glucose levels and body mass index (BMI) in individuals with type 2 diabetes mellitus (T2DM) in home settings²¹.

Ultimately, the eighth essential factor—sleep health—is often overlooked but is crucial for overall cardiovascular wellness. Digital health intervention strategies, including sleep tracking apps like Calm, Headspace, and Sleep Cycle, were reviewed for this study. These apps can enhance sleep patterns and provide tools to promote better sleep health, allowing individuals to monitor their sleep and identify factors contributing to poor sleep quality. They offer insights and tips to improve sleep hygiene, while wearable devices can track sleep duration and quality, enabling users to make informed lifestyle adjustments. Various wearable devices have been combined with mobile apps to record sleep duration and identify sleep-related issues²².²³ define sleep health as “a multidimensional pattern of sleep-wakefulness, adapted to individual, social, and environmental demands, promoting physical and mental well-being.” The authors emphasize that insufficient sleep can contribute to chronic conditions, including obesity and cardiovascular disease²³.

Table 1. Review of Applications to Manage the American Heart Association 8 Essential Framework.

Smoking Apps	Functions	Downloads	Reviews	Available/Compatibility
QuitNow	<p>QuitNow provides a comprehensive list of health indicators that detail how your body improves day by day.</p> <p>The indicators are based on information sourced from the World Health Organization.</p> <p>Offers users 70 goals tailored to the number of cigarettes they have avoided.</p> <p>Users are encouraged to celebrate their achievements at all stages of their quitting journey.</p> <p>Specifically designed to assist individuals in quitting smoking.</p> <p>The app includes health statistics, personal achievements, and a community of users who are also on their quitting journey.</p> <p>Ex-Smoker Status, Achievements, Community, and Ex-Smoker Health.</p>	1 million	4.5/5 Ratings 66.2K Reviews	<p>Device Compatibility: Available for both iPhone and Android devices.</p> <p>Download Availability: Can be downloaded from the Apple Store and Google Play.</p> <p>Multilingual Support: The app supports multiple languages, including: English, Arabic, Catalan, Czech, Dutch, French, German, Greek, Hebrew, Hungarian, Indonesian, Italian, Korean, Polish, Portuguese, Romanian, Russian, Simplified Chinese, Spanish, Traditional Chinese, Turkish</p>
Kwit	<p>Offers resources and tools to assist individuals in quitting smoking.</p> <p>Provides support for reducing consumption of nicotine replacement therapy.</p> <p>Electronic Cigarette Cessation: Aids users in stopping the use of electronic cigarettes.</p> <p>Vaping Control: Helps users manage and control their vaping habits.</p> <p>Monitoring Tools: Includes features to track gum and patch consumption.</p> <p>Craving Management: Provides insights and strategies for understanding and managing cravings.</p>	1 Million	4.4/5 Ratings 15 K Reviews	<p>Device Compatibility: Works with both iPhone and Android devices.</p> <p>Download Availability: Can be easily downloaded from the Apple Store and Google Play.</p> <p>Multilingual Support: The app offers support in various languages, including: English, Dutch, French, German, Italian, Japanese, Portuguese, Russian, Spanish, Turkish, Ukrainian</p>
Smoke Free	<p>Allows users to track their quitting journey and log successful smoke-free days.</p> <p>Offers proven strategies and plans that help individuals successfully quit smoking.</p> <p>Provides access to expert guidance and support available 24/7.</p> <p>Features a chatbot loaded with tips and resources to assist users in their quitting process.</p>	1 Million	4.8/5 Ratings 59.6K Reviews	<p>Available for both iPhone and Android devices. Can be downloaded from the Apple Store and Google Play.</p> <p>The app supports multiple languages, including: English, French, German, Portuguese, Russian, Spanish, Welsh</p>

My QuitBuddy	<p>Choose to 'Quit Now', prepare to 'Quit Later', or 'Continue Quitting' based on your readiness.</p> <p>Goal Setting: Establish your personal goals and understand your motivations for quitting.</p> <p>Nominate friends or family members you can call during tough times for additional support.</p> <p>Monitor your progress with a count of each day, hour, and minute you remain smoke- and vape-free, as well as how much money you've saved.</p> <p>Receive a helpful tip each day for the first 30 days of your quitting journey when you open the app.</p> <p>Danger Time Alerts: Identify critical moments (Danger Times) and connect with My QuitBuddy for support to stay on track.</p> <ul style="list-style-type: none"> •Distraction Tools: Access a variety of distractions to help occupy your mind and hands during cravings. •Community Support: Read and share encouraging messages with others who are also quitting using My QuitBuddy. •Direct Quitline Access: Easily call the Quitline at 13 7848 (13 QUIT) directly from the app for additional assistance. 	100K	4.6/5 Ratings 1.56K reviews	Available for both iPhone and Android devices. Can be downloaded from the Apple Store and Google Play. Access helpful tips and distractions specifically designed to help you overcome cravings. Utilize tracking systems to chart your quit journey and monitor your progress over time. Get all the essential facts you need to understand the impacts of smoking and vaping on your health.
Nutrition apps	Functions	Downloads	Reviews/Ratings	Available/Compatibility
MyfitnessPal	<p>Progress Tracking: Monitor your progress towards health, nutrition, fitness, and weight loss goals with MyFitnessPal.</p> <p>All-in-One Tracker: Utilize the app as a food tracker, calorie counter, macro tracker, and fitness tracker, acting like a personal nutrition coach.</p> <p>Daily Support: Benefit from the features of a meal planner, fitness tracker, and food diary all in one app.</p> <p>Health and Nutrition Focus: Learn about your food habits, monitor your diet, and take steps to conquer your health goals.</p> <p>User-Friendly Interface: Enjoy a straightforward app experience designed to support your wellness journey each day.</p>	100 Million	4.4/5 Ratings 2.82 Million Reviews	<p>Device Compatibility: MyFitnessPal is available for download on both Android phones and iPhones.</p> <p>Free Standard Features: The app offers standard features at no cost to users.</p> <p>Complimentary Download: MyFitnessPal can be downloaded for free on both iOS and Android platforms.</p>
Cronometer		10 Million	4.7/5 Ratings	

	<p>From macros to micros, Cronometer gives you personalized insight into your diet, exercise, and health data so you can make more informed decisions about your health.</p> <p>See which of the essential 84 vitamins and minerals you're getting the most and least of, helping you eat a more balanced diet.</p> <p>Monitor your food intake with detailed food journaling, verified nutrition information, and a built-in nutritional target wizard to keep yourself accountable.</p> <p>Sync Cronometer with all your devices and track all your biometrics from pain symptoms to gut health to blood sugar levels and more.</p> <p>Keep track of your food intake, exercise routines, and weight.</p> <p>Utilize the world's highest quality food and nutrition database for accurate tracking.</p>		34k Reviews	<p>Download Cronometer from the App Store and Google Play.</p> <p>Compatible with all devices for seamless access. User-friendly design for easy tracking of your nutrition and health goals.</p> <p>Stay on top of your dietary needs anytime, anywhere.</p>
FatSecret	<p>Connect with a global community of individuals dedicated to making positive lifestyle changes.</p> <p>Start losing weight and achieving your health goals the healthy way.</p> <p>Share experiences, tips, and motivation with others on a similar journey.</p> <p>Enter your current weight, goal weight, and desired pace of weight loss.</p>	50 Million	4.5/5 Ratings 517K Reviews	<p>Download FatSecret from the App Store and Google Play.</p> <p>Available for all devices, ensuring accessibility for everyone.</p> <p>User-friendly interface designed for easy navigation across platforms.</p> <p>Track your health and fitness goals on any device at your convenience.</p>
Lifesum	<p>Set your dietary preferences to tailor your plan.</p> <p>Choose a health plan that aligns with your goals.</p> <p>Discover the diet that works best for you and enjoy support throughout your journey.</p> <p>Access a personalized calorie counter and macro tracker.</p> <p>Benefit from diet plans featuring delicious recipes.</p> <p>Health & Nutrition Advice: Receive guidance and tips on health and nutrition along the way.</p> <p>Customize meal plans to suit various diets, including vegan, paleo, keto, and more.</p> <p>Track your calorie intake to align with your specific goals, whether for weight loss, maintenance, or muscle gain.</p>	10 Million	4.7/5 Ratings 142.5K Reviews	<p>Can download Lifesum from the App Store and Google Play.</p> <p>Compatibility</p> <p>iPhone Requires iOS 15.0 or later.</p> <p>iPad Requires iPadOS 15.0 or later.</p> <p>iPod touch Requires iOS 15.0 or later.</p> <p>Apple Watch Requires watchOS 7.0 or later.</p> <p>Apple Vision Requires visionOS 1.0 or later.</p>

	<p>Automatically generate grocery lists based on your meal plans, with integration to services like Instacart and AmazonFresh for convenient shopping.</p> <p>Minimize food waste by planning meals and utilizing ingredients you already have on hand.</p> <p>Simplify meal planning to make it easier to adhere to your diet and achieve your nutritional goals.</p>			<p>Languages</p> <p>English, Danish, Dutch, French, German, Italian, Norwegian Bokmål, Portuguese, Russian, Spanish, Swedish</p>
Physical Activity App	Functions	Downloads	Reviews/Ratings	Available/Compatibility
Strava	<p>Track your entire active journey in one place, including runs, rides, hikes, yoga, and over 30 other sports.</p> <p>Use the Routes tool to find popular routes tailored to your preferences, or create your own routes.</p> <p>Connect with a community that celebrates movement and encourages each other.</p> <p>Gain data insights to monitor your progress and improvements through your comprehensive Training Log.</p> <p>Utilize AI-driven Athlete Intelligence for immediate insights from your workout data, keeping you motivated and informed.</p> <p>Share your real-time location with loved ones for added safety during outdoor activities.</p> <p>Compatible with thousands of apps and devices, including Apple Watch, Fitbit, and Garmin.</p> <p>Participate in monthly challenges with millions of others to set new goals, earn digital badges, and stay accountable.</p> <p>Experience a feed filled with genuine efforts from a diverse group of people, providing motivation for all.</p>	50 Million	<p>4.4/5 Ratings</p> <p>940K Reviews</p>	<p>Can download Strava from the App Store and Google Play.</p> <p>Compatibility</p> <p>iPhone</p> <p>Requires iOS 16.0 or later.</p> <p>Apple Watch</p> <p>Requires watchOS 9.0 or later.</p> <p>Languages</p> <p>English, Dutch, French, German, Indonesian, Italian, Japanese, Portuguese, Russian, Simplified Chinese, Spanish, Traditional Chinese.</p>
Fitbit	<p>Track key statistics related to health, fitness, and sleep, adapting your goals as your routines evolve.</p> <p>Stay motivated with energizing workout content designed for both your body and mind.</p> <p>Easily view your personal goal progress and see how you measure up against friends and family.</p> <p>Unlock additional features by syncing with wearable devices like Fitbit for an even more personalized experience.</p>	100 Million	<p>4.1½ Ratings</p> <p>1.18 Million Reviews</p>	<p>Can download Fitbit from the App Store and Google Play.</p> <p>Compatibility</p> <p>iPhone</p> <p>Requires iOS 16.4 or later.</p> <p>Languages</p> <p>English, Czech, Dutch, French, German, Indonesian, Italian, Japanese, Korean, Norwegian Bokmål, Polish, Portuguese, Romanian, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese</p>
Nike Run Club	<p>Access various training plans to suit different running goals and fitness levels.</p>	10 Million	4.1/5 Ratings	

MapMyRun	<p>Participate in guided runs led by experienced coaches to enhance your running experience. Benefit from valuable health and fitness tips to optimize your training and overall well-being. Engage in community challenges to stay motivated and connect with fellow runners. Receive support from Nike coaches who are there to guide you every step of the way. Choose from training for half marathons, wellness runs, and more tailored to your interests and goals.</p> <p>Map My Run is designed as the ultimate running tracker app suitable for all runners, from beginners to experienced athletes. Helps you take your running to the next level with tools tailored to help you achieve your goals. Log every run, allowing you to track your progress over time. Access customizable training plans to fit your specific needs and fitness levels. Get real-time statistics for outdoor runs, treadmill workouts, and any type of running session. Receive personalized coaching tips to improve your performance and maintain motivation. Engage with a community of fellow runners for additional support and motivation. This app is more than just a running tracker; it serves as a comprehensive tool for your entire running journey.</p>	10 Million	<p>1.09 Million Reviews</p> <p>4.8/5 Ratings 443K Reviews</p>	<p>Can download Nike Run Club from the App Store and Google Play. Compatibility iPhone Requires iOS 17.0 or later. Apple Watch Requires watchOS 10.0 or later.</p> <p>Languages English, Dutch, French, German, Indonesian, Italian, Japanese, Korean, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Thai, Traditional Chinese, Turkish</p> <p>Can download MapMyRun from the App Store and Google Play. Compatibility iPhone Requires iOS 15.0 or later. iPod touch Requires iOS 15.0 or later. Apple Watch Requires watchOS 7.0 or later.</p> <p>Languages English, Danish, French, German, Indonesian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Traditional Chinese</p>
Noom	<p>Can access a food database with over 1 million items to easily log your meals. Can explore thousands of simple and nutritious recipes designed for a balanced diet. Can benefit from meal plans created by registered dietitians to support your nutritional goals. Can engage with over 1,000 interactive lessons at your own pace on topics such as the psychology of weight loss, mindful eating, and goal setting. Can track your progress and identify areas for improvement in your lifestyle with tailored health insights.</p>	10 Millions	<p>4.7/5 Ratings 314K Reviews</p>	<p>Download MapMyRun from the App Store and Google Play. Compatibility iphone Requires iOS 16.0 or later. Apple visionOS 1.0 or later. Languages English, German, Korean, Spanish Device Compatibility: Sync various devices (Fitbit, Misfit, Garmin, Withings, smart scales, etc.) to track all your activities in one convenient location.</p>

Weight Watchers	<p>Can join groups of community members who share similar interests and goals for added support and motivation.</p> <p>Can use the water tracking feature to monitor your hydration levels and stay healthy.</p> <p>Can connect with the Health App to keep track of trends in your activity and overall health.</p> <p>Set your desired weight loss rate</p> <p>WeightWatchers is the ##1 doctor-recommended weight-loss program.</p> <p>Users can lose 3.5 times more weight and maintain it with tailored solutions designed for every body type.</p> <p>The established Points program serves as the foundation of the WeightWatchers approach to weight loss.</p> <p>Can personalized food plans and nutrition guidance to fit individual needs and preferences.</p>	10 Million	4.5/5 Ratings 593K Reviews	<p>Can download Weight Watchers from the App Store and Google Play.</p> <p>Compatibility</p> <p>iPhone Requires iOS 15.1 or later.</p> <p>iPad Requires iPadOS 15.1 or later.</p> <p>iPod touch Requires iOS 15.1 or later.</p> <p>Mac Requires macOS 12.0 or later and a Mac with Apple M1 chip or later.</p> <p>Apple Watch Requires watchOS 8.0 or later.</p> <p>Apple Vision Requires visionOS 1.0 or later.</p> <p>Languages English, Dutch, French, German, Portuguese, Swedish</p>
DietBet	<p>Commit to reaching your weight loss goals by making a personal pledge.</p> <p>Can join a supportive community that encourages one another throughout the weight loss journey.</p> <p>Receive assistance from dedicated customer service representatives who are real people.</p> <p>Participate in games hosted by experts, including professional fitness trainers, nutritionists, and wellness gurus.</p> <p>Access motivational support whenever you need it most to help keep you on track.</p>	100 K	4.7/5 Ratings 14.1K Reviews	<p>Can download DietBet from the App Store and Google Play.</p> <p>Compatibility</p> <p>iPhone Requires iOS 15.5 or later.</p> <p>iPad Requires iPadOS 15.5 or later.</p> <p>iPod touch Requires iOS 15.5 or later.</p> <p>Mac Requires macOS 13.0 or later and a Mac with Apple M1 chip or later.</p>

Fooducate	<p>Fooducate is specifically designed to help users lose weight and maintain their weight loss. Discover and understand which foods are healthiest, featuring detailed and up-to-date nutrition and ingredient information.</p> <p>Track your calories, macronutrients (macros), and workouts all in one place.</p> <p>Get motivated by connecting with a community of health and wellness enthusiasts, and share diet tips and recipes.</p> <p>Can download the app to begin your journey toward better health and wellness today</p>	1 Million	4.1 /5 Ratings 18.2K Reviews	<p>Apple Vision Requires visionOS 1.0 or later.</p> <p>Can download Fooducate from the App Store and Google Play</p> <p>Compatibility</p> <p>iPhone Requires iOS 13.0 or later.</p> <p>iPad Requires iPadOS 13.0 or later.</p> <p>iPod touch Requires iOS 13.0 or later.</p> <p>Mac Requires macOS 11.0 or later and a Mac with Apple M1 chip or later.</p> <p>Apple Vision Requires visionOS 1.0 or later.</p> <p>Languages English, French, German, Italian, Portuguese, Spanish</p>
Blood Pressure App	Functions	Downloads	Reviews/Ratings	Availability/Compatibility
Blood Pressure Companion	<p>Spreadsheet Creation: Create and print a spreadsheet of readings with 5 or 6 columns of information, including date, pulse, MAP, notes, weight, systolic, and diastolic readings.</p> <p>Notes Section: Write notes for each reading, such as medication intake (e.g., took meds, did not take meds) or comments on stressful days.</p> <p>Automatic Syncing: Set up automatic syncing of information to the Health app for easy tracking.</p> <p>MAP Reading: Access MAP readings, which provide insights into arterial blood flow to major organs like the kidneys and brain, with a normal range considered between 70 and 100 mmHg by doctors.</p> <p>Free and Upgrade Options: Use the app at no cost, with options for upgrades that offer additional features while providing basic and useful information.</p> <p>Track Heart Rate trends Sync ECG records</p>	Not applicable	4.3/5 Ratings 1.3K Reviews.	<p>Compatibility</p> <p>iPhone Requires iOS 14.0 or later.</p> <p>Languages English, Arabic, Czech, Dutch, French, German, Hindi, Indonesian, Italian, Japanese, Korean, Malay, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Thai, Traditional Chinese, Turkish</p>

Blood Pressure Tracker SmartBP	<p>Back up health data and access it on all mobile devices with SmartBP Cloud.</p> <p>Sync directly between iPhone and iPad through Bluetooth or WiFi without sharing on the cloud.</p> <p>Back up blood pressure data by exporting to Dropbox, and Drive, or import from CSV files into the app.</p> <p>Protect your data with TouchID, FaceID or Pin keypad protection.</p> <p>Set medication reminders & track effectiveness.</p> <p>Intuitive color-coded data to identify normal, prehypertensive, stage I and II hypertension.</p> <p>Categorize your records based on 2017 ACA/AHA, 2023 ESC/ESH or create your own custom categories.</p>	1 Million	3.9/5 Ratings 4.86K Reviews	Blood Pressure Tracker SmartBP is free and available for download on both Google Play and Apple app stores.
iHeart	<p>The MyVitals App allows users to easily manage and view their health data.</p> <p>Create an iHealth account to securely store your data in the cloud by connecting your devices.</p> <p>The app supports various devices, including:</p> <ul style="list-style-type: none"> Health blood pressure monitors Pulse oximeters Touchless forehead thermometers Weighing scales Smartwatches (enables connection to mobile devices for sending/receiving texts and phone calls) 	100K	4.8/5 Ratings 14.1K Reviews	iHeart is available for download on both Google Play and Apple app stores.
Cardioo	<p>In-depth pulse waveform analysis</p> <p>Blood pressure estimates and detailed oxygen tracking</p> <p>Tailored calorie burn estimator for your activities</p> <p>Personalized health comparisons by age and sex</p> <p>Hypothetical life expectancy based on your heart trends</p>	None	4.7/5 Ratings 58.1K Reviews	Cardioo is available for download on both Apple app stores.
Cholesterol management	Functions	Downloads	Ratings/Reviews	Availability/Compatibility
My Heartlet	<p>Can find out the cholesterol, fat and protein content in various foods. This helps you stick to a heart-healthy diet.</p> <p>Can keep an eye on your blood pressure and weight changes with clear charts and stats.</p>	100 K	4.4/5 Ratings 1.14K Reviews	My Heartlet is available for download on both Apple app stores.

Nutritionix	<p>Can calculate the cholesterol, fat, and protein in your meals. This makes it easier to watch what you eat. Can get useful info about how cholesterol affects your health and how to eat better.</p> <p>Food intake Nutrient totals Exercise Weight and weight progress Calorie and macro goals Water intake 800K+ unique foods Coverage of 95% of grocery items in the US and Canada 760+ US restaurant chain menus Thousands of common foods recipes created by our in-house team of dietitians</p>	1 Million	4.7/5 Ratings 18.4K Reviews	Nutritionix is available for download on both Apple app stores.
LDL: Cholesterol	<p>LDL: Cholesterol features: Can Share your cholesterol test result with other platforms. Can Get a Daily Reminder to enter cholesterol test results by your selected time. Can Easily Backup and Restore your cholesterol test result data with Google drive backup. Cholesterol calculator indicates different levels Provide information section: What is cholesterol? Different Cholesterol test measurements. Information about cholesterol indicators. •Why do I need a cholesterol test?</p>	50K	3.8/5 Ratings 101 Reviews	LDL: Cholesterol is available for download on both Apple app stores.
Glucose Monitoring App	Functions	Downloads	Ratings/Reviews	Availability/Compatibility
Glooko	<p>Easy to read graphs. Easy to enter information quickly without extra clicks. Excellent reports on the website. Allows entry of custom medications such as Symlin, GLP-1, etc.</p>	100K	$\frac{3}{5}$ Ratings 2.03K Reviews	Glooko is available for download on both Apple app stores.

MySugr	<p>Data export feature (however this could be better; I have to select the email option and then grab the file from an email rather than export directly). Pleasing color scheme. Reminders for medication Displays average BG and insulin over various periods of time. Syncs with Strava for exercise data! Fast load without the extra useless eye candy of other diabetes management apps.</p> <p>Current day stats visible for (bolus-) fine-tuning Colorful infographics make for easy pattern detection Compare weekday data and analyze blood sugar for trends Simply swipe left and see patterns for the week, month, and even quart.</p> <p>Designed for both smartphones and tablets, making it accessible across multiple devices. This application aids in better management and control of diabetes, suitable for users with Type 1, Type 2, or Gestational Diabetes. Ideal for individuals who want to help and monitor a family member's diabetes management. Tracks nearly all aspects of diabetes treatment, providing users with detailed reports, charts, and statistics. Allows users to send reports to their supervising physician via email for seamless communication and care management.</p>	5 Million	4.6/5 Ratings 117K Reviews	MySugr is available for download on both Apple app stores
Diabetes:M	<p>Designed for both smartphones and tablets, making it accessible for users on different devices. Helps individuals manage their diabetes more effectively and keep it under control, suitable for Type 1, Type 2, and Gestational Diabetes. Ideal for personal use or for monitoring a family member's diabetes treatment. Tracks nearly all aspects of diabetes treatment, providing detailed reports, charts, and statistics.</p>	500K	3.9/5 Ratings 23.6K Reviews	<p>Diabetes:M is available for download on both Apple app stores.</p> <p>Compatibility</p> <p>iPhone Requires iOS 15.0 or later.</p> <p>iPad Requires iPadOS 15.0 or later.</p> <p>iPod touch Requires iOS 15.0 or later.</p>

	Allows users to send their reports to supervising physicians via email for streamlined communication. Offers various tools to support users in their diabetes management journey, enhancing overall treatment effectiveness.			Mac Requires macOS 12.0 or later and a Mac with Apple M1 chip or later. Apple Watch Requires watchOS 4.0 or later. Apple Vision Requires visionOS 1.0 or later. Languages English, Bulgarian, Catalan, Dutch, German, Portuguese, Russian, Spanish
Sleep Health	Functions	Downloads	Ratings/Reviews	Availability/Compatibility
Calm	Calm is recognized as the ##1 app for sleep, meditation, and relaxation. Effectively manages stress and helps balance moods for overall well-being. Provides tools to help users sleep better and improve sleep quality. Offers a wide variety of guided meditations to suit different needs and preferences. Features calming Sleep Stories that promote relaxation and help users drift off to sleep. Includes soothing soundscapes designed to enhance relaxation and focus. Provides breathwork exercises and stretching routines to promote physical and mental well-being.	50 Million	4.4/5 Ratings 594K Reviews	Calm is available for download on both Apple app stores. Compatibility iPhone Requires iOS 16.0 or later. iPad Requires iPadOS 16.0 or later. Mac Requires macOS 13.0 or later and a Mac with Apple M1 chip or later. Apple TV Requires tvOS 11.2 or later. Apple Watch Requires watchOS 8.3 or later. Apple Vision Requires visionOS 1.0 or later. Languages English, French, German, Italian, Japanese, Korean, Polish, Portuguese, Spanish, Traditional Chinese
Headspace	Encourages users to practice self-healing and discover a happier version of themselves through mindfulness and relaxation techniques. Headspace serves as a comprehensive guide to mental health, mindfulness, and meditation. Designed to help users stress less and cultivate a sense of calm. Offers resources to help users sleep deeper and improve overall sleep quality. Features a variety of expert-guided meditation sessions tailored to different needs.	10 Million	4.4/5 Ratings 332K Reviews	Headspace is available for download on both Apple app stores Compatibility iPhone Requires iOS 15.0 or later. iPad Requires iPadOS 15.0 or later. iPod touch Requires iOS 15.0 or later. Mac

<p>Sleep Cycle</p>	<p>Provides personalized mental health coaching and therapy options for individual support. Includes daily exercises to cultivate mindfulness and enhance mental well-being. Choose from hundreds of meditation sessions focused on various topics, such as meditation techniques, stress management, and anxiety relief. Learn effective breathing techniques to reduce anxiety and promote relaxation. Aims to achieve greater calmness and improve overall mental wellness through structured practices.</p> <p>Helps relieve stress and promotes better overall well-being. Aids in sleeping better and waking up feeling rested. Serves as a personal sleep tracker to monitor sleep patterns and improve sleep quality. Features a smart alarm clock that gently wakes you up during the lightest sleep phase for a more refreshing start to the day. Includes a snore recorder to track snoring patterns while you sleep. Offers a sleep recorder to capture sounds and disturbances that occur during the night. Provides calming sleep sounds to enhance your sleep environment. Users report improved mood and feelings of being recharged and focused throughout the day.</p>	<p>10 Million</p>	<p>4.3/5 Ratings 209K Reviews</p>	<p>Requires macOS 12.0 or later and a Mac with Apple M1 chip or later. Apple Watch Requires watchOS 9.0 or later. Apple Vision Requires visionOS 1.0 or later. Languages English, French, German, Portuguese, Simplified Chinese, Spanish</p> <p>Compatibility iPhone Requires iOS 15.0 or later. iPad Requires iPadOS 15.0 or later. iPod touch Requires iOS 15.0 or later. Apple Watch Requires watchOS 7.1 or later. Apple Vision Requires visionOS 1.0 or later.</p> <p>Languages English, Dutch, French, German, Italian, Japanese, Korean, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, Turkish</p>
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Conclusion

In conclusion, addressing the eight Essential Life Factors outlined by the American Heart Association is crucial for promoting cardiovascular health. Digital health interventions, including mobile applications and online support systems, have emerged as effective tools for engaging patients and facilitating lifestyle changes. By leveraging technology, individuals can track their health

metrics, access personalized support, and connect with communities that promote accountability. These strategies can lead to significantly improved health outcomes for those at risk of, or living with, cardiovascular conditions. As technology continues to evolve, ongoing research and development in digital health solutions will be essential to enhance patient engagement and improve the management of cardiovascular disease risk factors.

References

- Vaduganathan, M., Mensah, G. A., Turco, J. V., Fuster, V., Roth, G. A. (2022). The Global Burden of Cardiovascular Diseases and Risk: A Compass for Future Health. *JACC*. 80 (25) 2361–2371. <https://doi.org/10.1016/j.jacc.2022.11.005>
- Roth GA, Mensah GA, Johnson CO, Addolorato G, Ammirati E, Baddour LM, Barengo NC, Beaton AZ, Benjamin EJ, Benziger CP, Bonny A, Brauer M, Brodmann M, Cahill TJ, Carapetis J, Catapano AL, Chugh SS, Cooper LT, Coresh J, Criqui M, et al. Global burden of cardiovascular diseases and risk factors, 1990-2019: Update from the GBD 2019 study. *J Am Coll Cardiol*. 2020;76(25):2982–3021. <https://doi.org/10.1016/j.jacc.2020.11.010>
- Li B, Heydari K, Enichen EJ, Kvedar JC. A mobile health application that supports a patient-centered approach to cardiovascular risk management. *NPJ Digit Med*. 2025;8:150. <https://doi.org/10.1038/s41746-025-01549-7>
- American Heart Association, Inc. Life's Essential 8. Published 2025. Retrieved: [Life's Essential 8 | American Heart Association](https://www.heart.org/en/health-topics/lifes-essential-8)
- Awad A, Trenfield SJ, Pollard TD, Ong JJ, Elbadawi M, McCoubrey LE, Goyanes A, Gaisford S, Basit AW. Connected healthcare: Improving patient care using digital health technologies. *Adv Drug Deliv Rev*. 2021;178:113958. doi:10.1016/j.addr.2021.113958. <https://doi.org/10.1016/j.addr.2021.113958>
- Cobos-Campos R, Cordero-Guevara JA, Apiñaniz A, de Lafuente AS, Bermúdez Ampudia C, Argaluz Escudero J, Pérez Llanos I, Parraza Díez N. The impact of digital health on smoking cessation. *Interact J Med Res*. 2023;12:e41182. <https://doi.org/10.2196/41182>
- Onwuzo CN, Olukorode J, Sange W, Orimoloye DA, Udojike C, Omoragbon L, Hassan AE, Falade DM, Omiko R, Odunaike OS, Adams-Momoh PA, Addeh E, Onwuzo S, Joseph-Erameh U. A review of smoking cessation interventions: Efficacy, strategies for implementation, and future directions. *Cureus*. 2024;16(1):e52102. <https://doi.org/10.7759/cureus.52102>
- Ronteltap A, Bukman AJ, Nagelhout GE, Hermans RCJ, Hoper K, Haveman-Nies A, Lupker R, Bolman CAW. Digital health interventions to improve eating behaviour of people with a lower socioeconomic position: A scoping review of behaviour change techniques. *BMC Nutr*. 2022;8(1):145. <https://doi.org/10.1186/s40795-022-00635-3>
- Bi S, Yuan J, Wang Y, Zhang W, Zhang L, Zhang Y, Zhu R, Luo L. Effectiveness of digital health interventions in promoting physical activity among college students: Systematic review and meta-analysis. *J Med Internet Res*. 2024;26:e51714. <https://doi.org/10.2196/51714>
- Hall KD, Kahan S. Maintenance of lost weight and long-term management of obesity. *Med Clin North Am*. 2018;102(1):183–197. <https://doi.org/10.1016/j.mcna.2017.08.012>
- Al Naabi Y, Ibrahim N, Dhillon JS. Designing sustainable mobile weight management applications: Information technology (IT) experts' perspectives. *mHealth*. 2024;10:25. <https://doi.org/10.21037/mhealth-24-4>
- Silberman JM, Kaur M, Sletteland J, Venkatesan A. Outcomes in a digital weight management intervention with one-on-one health coaching. *PLoS One*. 2020;15(4):e0232221. <https://doi.org/10.1371/journal.pone.0232221>
- Carey RM, Wright JT Jr, Taler SJ, Whelton PK. Guideline-driven management of hypertension: An evidence-based update. *Circ Res*. 2021;128(7):827–846. <https://doi.org/10.1161/CIRCRESAHA.121.318083>
- Hare AJ, Chokshi N, Adusumalli S. Novel digital technologies for blood pressure monitoring and hypertension management. *Curr Cardiovasc Risk Rep*. 2021;15(8):11. <https://doi.org/10.1007/s12170-021-00672-w>
- Mohrag M, Mojiri ME, Hakami MS, Alghamdi MS, Moafa AY, Kreet SJ, Alghamdi SM, Nasib HA, Alghamdi OR, Ayoub SM, Hakami AA, Tawashi SM, Tayeb RM, Kariry AA, Ayyashi SM. The impact of wearable technologies on blood pressure control in hypertensive patients: A systematic review and meta-analysis. *Cureus*. 2024;16(10):e71220. <https://doi.org/10.7759/cureus.71220>
- Vudathaneni VKP, Lanke RB, Mudaliyar MC, Movva KV, Kalluri LM, Boyapati R. The impact of telemedicine and remote patient monitoring on healthcare delivery: A comprehensive evaluation. *Cureus*. 2024;16(3):e55534. <https://doi.org/10.7759/cureus.55534>
- Hu EA, Scharen J, Nguyen V, Langheier J. Evaluating the impact of a digital nutrition platform on cholesterol levels in users with dyslipidemia: Longitudinal study. *JMIR Cardio*. 2021;5(1):e28392. <https://doi.org/10.2196/28392>
- Su L, Mittal R, Ramgobin D, Jain R, Jain R. Current management guidelines on hyperlipidemia: The silent killer. *J Lipids*. 2021;2021:9883352. <https://doi.org/10.1155/2021/9883352>
- Doyle-Delgado K, Chamberlain JJ. Use of diabetes-related applications and digital health tools by people with diabetes and their health care providers. *Clin Diabetes*. 2020;38(5):449–461. <https://doi.org/10.2337/cd20-0046>
- Weinstock RS, Aleppo G, Bailey TS, et al. The role of blood glucose monitoring in diabetes management. Arlington, VA: American Diabetes Association; 2020. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK566165/>. doi:10.2337/db2020-31.
- Xiao Y, Wang Z, Zhang L, Xie N, Chen F, Song Z, Zhao S. Effectiveness of digital diabetes management technology on blood glucose in patients with type 2 diabetes at home: Systematic review and meta-analysis. *J Med Internet Res*. 2025;27:e66441. <https://doi.org/10.2196/66441>
- Al Mahmud A, Wu J, Mubin O. A scoping review of mobile apps for sleep management: User needs and design considerations. *Front Psychiatry*. 2022;13:1037927. <https://doi.org/10.3389/fpsy.2022.1037927>

23. Albakri U, Drotos E, Meertens R. Sleep health promotion interventions and their effectiveness: An umbrella review. *Int J Environ Res Public Health*.

2021;18(11):5533.

<https://doi.org/10.3390/ijerph18115533>

Additional References

- QuitNow. Own your health. Quit smoking. Available from: [QuitNow. Quit smoking. Own your health](#). Accessed 05/10/2025.
- My QuitBuddy. Department of Health and Aged Care. Available from: play.google.com/store/apps/details?id=com.theprojectfactory.quitbuddy&hl=en-US Accessed 05/10/2025.
- SmokeFree-Quit Smoking Now. Available from: [Smoke Free - Quit Smoking Now on the App Store](#) Accessed 05/10/2025.
- Kwit quit smoking for good! Available from: [Kwit - Quit smoking for good! - Apps on Google Play](#) Accessed 05/10/2025.
- MyFitnessPal. Available from: [MyFitnessPal: Free Calorie Counter App for Android | MyFitnessPal](#) Accessed 05/10/2025.
- Cronometer. Available from: [The Most Accurate Nutrition Tracking App | Cronometer](#). Accessed 05/10/2025.
- FatSecret. Available from: [Calorie Counter by fatsecret - Apps on Google Play](#) Accessed 05/10/2025.
- Lifesum. Available from: [Lifesum Health App - Get Healthy, Lose Weight, or Gain Muscle](#) Accessed 05/10/2025.
- Strava. Available from: [Strava: Run, Bike, Hike on the App Store](#) . Accessed 05/10/2025.
- Fitbit. Available from: [Fitbit - Apps on Google Play](#) Accessed 05/10/2025.
- Nike Run Club. Available from: [Nike Run Club: Running Coach on the App Store](#) Accessed 05/10/2025.
- MapMyRun. Available from: [Map My Run GPS Running Tracker - Apps on Google Play](#) Accessed 05/10/2025.
- Noom. Available from: [Noom Weight Loss, Food Tracker on the App Store](#) Accessed 05/10/2025.
- Weight Watchers Program. Available from: [WeightWatchers Program - Apps on Google Play](#) Accessed 05/10/2025.
- Dietbet. Available from: [DietBet: Lose Weight & Win! - Apps on Google Play](#) Accessed 05/10/2025.
- Fooducate. Available from: [Fooducate: Nutrition Coach - Apps - AppStore](#) Accessed 05/10/2025.
- Blood Pressure Companion. Available from: [Blood Pressure Companion on the App Store](#) Accessed 05/10/2025.
- Blood Pressure Tracker SmartBP. Available from: [Blood Pressure Tracker SmartBP on the App Store](#) Accessed 05/10/2025.
- iHeart. Available from: [iHealth MyVitals - Apps on Google Play](#) Accessed 05/10/2025.
- My Heartlet. Available from: [My Heartlet: BP & Cholesterol on the App Store](#) Accessed 05/10/2025.
- Nutritionix. Available from: [Track - Calorie Counter - Apps on Google Play](#) Accessed 05/10/2025.
- LDL: Cholesterol Tracker. Available from: [LDL: Cholesterol Tracker on the App Store](#) Accessed 05/10/2025.
- Glooko. Available from: [Glooko - Track Diabetes Data - Apps on Google Play](#) Accessed 05/10/2025.
- MySugr. Available from: [mySugr - Diabetes Tracker Log - Apps on Google Play](#) Accessed 05/10/2025.
- Diabetes:M. Available from: [Diabetes:M - Blood Sugar Diary - Apps on Google Play](#) Accessed 05/10/2025.
- Calm. Available from: [Calm - Sleep, Meditate, Relax - Apps on Google Play](#) Accessed 05/10/2025.
- Headspace. Available from: [Headspace: Meditation & Sleep on the App Store](#) Accessed 05/10/2025.
- Sleep Cycle. Available from: [Sleep Cycle: Sleep Tracker - Apps on Google Play](#) Accessed 05/10/2025.