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Integrative Weight Loss Program 30-90 Days

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Abstract

The journey to achieving healthy weight management can be challenging for most people. The adoption and implementation of practical steps and strategies can help a person achieve the weight loss goals they have set for themselves over a specified period. The Integrative Weight Loss Program in this paper acknowledges the complex interaction between various factors in the process of weight control. The paper seeks to offer a complete, comprehensive, and revolutionary approach that individuals can utilize to achieve sustainable health and well-being. The individualized workout plans and balanced nutrition proposed in the paper offer insights on how to lose weight, which extend beyond the typical emphasis on weight loss. The proposed approach makes careful inclusion of various components such as making small lifestyle changes, tracking health measurements, and building a support system that would enable a person to achieve the set goals easily. The approach addresses both immediate weight loss goals and long- term healthy habits, which can be achieved by developing positive relationships with food, physical exercise, and body image. By taking a holistic approach, the program makes it possible for individuals to set out on a wellness journey that will last longer than the first stages of the program. Even as individuals complete the program, it will be possible to ensure that they develop appropriate practices that will enhance their lifelong wellbeing and vitality.

1. Introduction

The past few decades have seen a surge in the number of obesity cases affecting individuals across the world. This rise in obesity rates has called for the adoption of effective and sustainable strategies to enhance weight loss [1]. As individuals pursue good health and wellbeing, they are often forced to navigate the complex landscape of having to use prescription treatments with medicines such as Ozempic and peptide injections that have become highly popular [2]. While such traditional approaches to weight loss have been promising to many people, they also come with severe side effects and complications that could alter a person's life due to the impact they have on their health [3]. The purpose of this paper is to provide a holistic and innovative approach that can be applied by individuals seeking to lose weight. The transformative paradigm proposed in this paper offers an integrative weight loss program intended to last between 30 to 90 days, ensuring that individuals can transform their lives through proper nutrition and modern weight management methods. To do thing, the paper will provide a comprehensive plan that explores not only what individuals should eat and the nature of exercise they should engage in but also explores the importance of mental well-being in enhancing weight loss.

The subsequent sections in this paper delve deeper into the 30-to-90-day program aimed at empowering individuals working to achieve healthier lifestyles. Conducting thorough scrutiny of the prescription treatments and comparing the traditional and modern weight loss methods by focusing on the benefits of each and the side effects helps fortify the effectiveness of the proposed integrative approach. In

addition, the paper recognizes the need for the adoption of weight management methods that enhance the transition away from the use of unhealthy drugs, thereby serving as a guide for individuals seeking to integrate the proposed program into their weight management plan. This will go a long way in ensuring that individuals are able to shift from traditional treatments to the more sustainable, holistic, and health-centric methods that have been proven to be more effective.

1.1. Background of the Problem: Rising Obesity Epidemic

The obesity epidemic has become a formidable challenge in our contemporary society, affecting individuals from all over the world. The past few decades have seen a significant shift in the dietary patterns and lifestyles adopted by individuals. This is mainly characterized by increasingly sedentary lifestyle behaviors and a preference for high-calorie, processed food products [4]. It is this alarming trend that has contributed to the rising cases of obesity and a myriad of other health complications, such as diabetes, cardiovascular diseases, and other metabolic disorders affecting people across all geographical and socioeconomic spectrums [5]. According to the World Health Organization (WHO), there are more than 650 million individuals who can be categorized as obese worldwide.

In contrast, more than 1.9 billion people are overweight [1]. It is such huge figures that demand action to be taken given the consequences that this could have on individuals' health, the burden on the healthcare systems, and the impact it has on the economy. Given the multifaceted nature of the problem, comprehensive and innovative strategies are needed to solve

the problem by addressing the issue of weight reduction and nurturing sustainable lifestyle changes among people [6]. Therefore, the integrative weight loss program provides a holistic and effective approach that can be used to overcome the obesity pandemic that continues to haunt many people across the world.

1.2. Need for Integrative Approaches to Weight Loss

The realization that there is an intricate correlation between various factors such as genetic, lifestyle, and environmental factors makes it necessary to adopt an implement an integrative approach to weight loss. The adoption of conventional methods in managing weight has seen individuals rely on physical exercise and caloric restrictions as the only way to achieve a healthy weight [7]. However, this is not always the case, as this approach may fail to fully address the complex and diverse challenges experienced by individuals in trying to achieve and maintain healthy body weight. An integrative approach recognizes this intricate relationship between factors such as physical activity, nutrition, and mental well-being and a holistic weight reduction strategy in achieving sustainable success throughout this process [8]. Individuals dealing with weight management issues are also likely to be affected by coexisting health issues. This calls for the development of an effective and comprehensive approach that enables them to lose excess weight and improve their overall well-being [6]. This approach works by combining methods such as individualized exercise routines, mental health support, and dietary guidance, all of which are integrative approaches that provide individuals with a personalized toolkit and empower them to achieve long-term success in their efforts to lose excess weight.

1.3. Purpose of the Presentation Paper

The presentation paper aims to illuminate a path toward transformation that would enable individuals to achieve healthier living standards through the adoption of an integrative weight loss program that spans 30-90 days. Apart from exploring the various pharmaceutical intervention and weight loss strategies that most people are already familiar with; this paper provides a detailed guide outlining a structured plan to achieve this goal and evaluates the effectiveness of this plan in comparison to the traditional treatment methods. In addition, the paper does not only offer instructions on what individuals should eat and the physical exercise to participative but also emphasizes the link between physical activity, proper nutrition, and mental well-being in promoting healthy lifestyles. Therefore, the approach taken by this paper aims at ensuring that individuals are equipped with the tools and knowledge that would be essential in facilitating the attainment of holistic and sustainable weight loss. This goes a long way in addressing the escalating challenge of overweight and obesity affecting individuals globally.

1.4. Understanding Weight Loss

Understanding the concept of weight loss provides the foundation for individuals seeking to develop and adopt sustainable strategies that would help deal with the obesity epidemic. The multifaceted nature of the issue of weight loss calls for the adoption of tailored interventions that would help address the specific needs of the affected people [1]. This is mainly because overweight or obesity issues are a result of various factors, including metabolism, lifestyle, genetics, and environmental factors [5]. Understanding each of these factors, and the impact it has on individual choices and circumstances ensures that realistic expectations can be established that motivate individuals to keep going as they seek to achieve healthy weight. In addition, this ensures that the underlying health complications associated with weight gain can be identified, thereby facilitating the implementation of interventions that not only enable individuals to shed the extra pounds but also achieve holistic wellbeing [8]. Therefore, by understanding the particulars of weight loss, it becomes possible for individuals to make more informed decisions and choices about their mental health, nutrition, and exercise, which contributes to a healthy lifestyle in the long run.

1.5. Factors Influencing Weight Gain

Various factors could affect how much weight an individual gain over time. It is these factors that interact to determine how well the body is able to maintain the right balance between the calories an individual consumes and the calories the utilize each day [9]. Some of the main factors that influence weight gain among individuals include genetics, lifestyle, environment, and metabolism, as discussed below:

1.5.1. Genetics

Every individual has a unique genetic makeup, which influences how they synthesize proteins and other micronutrients for adequate growth and development. Genetics play a significant role in influencing a person's weight loss as it shapes their fat distribution in the body. metabolic rate, and propensity to lose or gain weight [5]. A wide range of genetic factors interact to influence the body's efficiency in carrying out particular processes and its ability to store energy. In turn, this influences the rate at which calories are used in the body, either during physical activity or while resting. Individuals may be predisposed to storing excess body fat by some genetic variations, which make it difficult for them to lose weight. In addition, these genetic factors are likely to influence appetite regulation and response to specific diets [9]. Therefore, it becomes important for one to understand these genetic nuances in order to devise weight loss strategies that are best suited for their genetic profile. However, it is also important to recognize the fact that while genetics could set the baseline for weight gain or loss, lifestyle modifications play the most important role in influencing the outcomes. As such, understanding the correlation between genetics and lifestyle modifications can help devise customized and highly effective interventions that would enable a person to achieve a healthy body weight.

1.5.2. Lifestyle

The lifestyle adopted by an individual has a critical role in influencing their health outcomes. In modern society, most individuals have adopted a sedentary lifestyle, which has resulted in a rapid increase in the cases of overweight

and obesity. In matters pertaining to weight loss, lifestyle factors go a long way in influencing the outcomes [6]. These factors include dietary habits, daily routines, and the level of physical activity. Making poor dietary choices can have detrimental health effects as individuals resort to excessive intake of processed food products that have highcalorie content. This significantly contributes to weight gain and could hinder a person from achieving healthy weight as much as it increases the likelihood of developing other chronic health complications such as diabetes, cardiovascular diseases, and kidney problems, among others [10]. In addition, leading a sedentary lifestyle impedes the process of burning excess calories due to a lack of physical activity, which exacerbates the calorie imbalance in the body. The adoption of a healthy, balanced diet enables individuals to maintain an appropriate and healthy caloric intake that caters to their energy requirements. It is also important to cultivate active daily habits with the incorporation of regular physical exercises, as this has a positive impact on the efforts to lose weight [11]. Making sustainable changes to a person's lifestyle not only promotes weight loss but also enhances their overall wellbeing [4]. This underscores the need to address behavioral aspects contributing to weight gain in an effort to build and implement an effect program to enhance weight loss.

1.5.3. Environment

The environment in which one is situated is also likely to impact how one responds to the efforts to achieve a healthy body weight. Environmental factors have a considerable impact on the outcomes as they are likely to impact the food choices and level of physical activities made by a person. In most modern environments, individuals often find themselves surrounded by a wide range of unhealthy choices that increase the risk of obesity and excessive weight gain [7]. These include the high availability of processed foods with high-calorie content, sedentary workspaces, and lack of facilities to encourage participation in physical activity. These can pose a severe challenge in the efforts to develop and implement an effective program to encourage weight loss. For most people, the built environments, such as the lack of play grounds or jogging tracks, discourage them from engaging in physical activity. in addition, the past few decades have seen a surge in the number of fast-food outlets that clearly encourage individuals to make unhealthy food consumption choices thereby resulting in excessive weight gain [12]. Therefore, the creation of environments aimed at encouraging healthy lifestyle behaviors, such as the construction of accessible green spaces and a workplace environment that encourages movement and physical exercise, would go a long way in encouraging weight loss among individuals. This requires that individuals and organizations recognize and modify the environmental factors that influence lifestyles, as this forms a critical part of any comprehensive weight loss program that would help achieve the goal of a healthy lifestyle.

1.5.4. Metabolism

Metabolism refers to the process through which the body is able to convert food into energy, which is then used in performing day-to-day activities. The rate of metabolism has a profound impact on the weight loss journey for every individual as much as it affects how much weight a person gain. Different individuals have different levels of metabolic rates, which are influenced by their genetic makeup, impacting the rate at which their body burns calories either during physical activity or while at rest [5]. Some individuals have faster metabolism, which enables them to burn more calories faster. In comparison, others have a slower metabolism, which leads to an accumulation of calories in the body, hence resulting in excessive weight gain. Therefore, a person needs to understand their metabolic profile as this helps tailor the strategies to lose weight to these specific needs. Various factors, including a person's age, medical conditions, and hormonal imbalances, are likely to influence their metabolic rates [5]. Therefore, by understanding the metabolic rate of a person, it becomes possible for nutritionists or healthcare providers to develop appropriate interventions that can help boost metabolism. This can be achieved through strategic dietary choices, targeted exercise, and muscle-building activities that are aimed at optimizing the utilization of energy in the body, thereby enhancing the efforts to lose excess weight [7].

1.6. Importance of Holistic Approaches

The development of a holistic approach to enhancing weight loss ensures that individuals do not focus solely on shedding the extra pounds but also on developing and adopting practices that lead to sustainable and comprehensive well-being. Holistic approaches to weight management recognize the fact that different aspects of a person's life, such as their mental, physical, and emotional well-being, are interconnected. Therefore, the holistic approaches focus on ensuring that the strategies put in place for effective weight management are able to address the root cause of excessive weight gain, including sedentary lifestyles, emotional eating, and stress [11]. This ensures that the strategies being implemented do not take a shallow approach by focusing purely on physical exercise and diet, which could see a person getting trapped in the same cycle of trying to lose weight year after year. The integration of the components of mental wellbeing, such as practicing mindfulness, stress management, and getting adequate sleep, plays a critical role in the attainment of weight management goals [13]. Therefore, the holistic approaches enable individuals to understand how diet, body image, and overall wellbeing are intertwined, which in turn facilitates behavioral changes that last beyond the duration of the program.

Adopting holistic approaches in weight management ensures that the strategies in place recognize the unique nature of every person's journey to lose wight. As such, one does not have to work with the assumption that one-size-fits-all, as this may not be the case when it comes to losing weight [14]. Taking an individualized perspective ensures that customized interventions can be developed with a focus on genetic predispositions, environmental factors, personal preferences, and lifestyle choices. By considering the personal as a whole, it becomes possible to ensure that lifelong lifestyle changes are created, unlike the situation

where quick fixes are offered to individuals to enable them to lose weight. Taking such a comprehensive approach not only enhances the chances of achieving healthy weight loss but also promotes sustainable wellbeing while helping prevent the common cycles of weight regain over the years [9]. Therefore, a holistic approach fosters a transformative journey towards the attainment of a healthier and fulfilling lifestyle.

1.7. Integrative Weight Loss Program Overview

The proposed integrative weight loss program provides a detailed and transformative plan that aims to address the multifaceted challenge of weight management among individuals. The program recognizes that different individuals have varying needs that could necessitate some changes to accommodate their unique preferences. This program is designed to run between 3090 days. It aims to establish a seamless integration between various components of a healthy lifestyle, such as proper nutrition, mental wellbeing, a supportive environment, and physical activity [15]. All these factors go a long way in the creation of a holistic weight management framework to help individuals seeking to achieve sustainable weight loss. In terms of nutrition, the program encourages individuals to practice balanced eating, which takes into consideration the micronutrients and macronutrients requirements in the body through a wellthought-out meal plan incorporating caloric intake, portion control, and meal timing [16].

On the other hand, the physical activity component considers the exercise regimen that best fits the individual seeking to lose weight, including strength training, flexibility, balance, and activities that promote cardiovascular health [11]. Additionally, the integrative weight loss program considers the role played by mental wellbeing in promoting healthy weight management. This is because factors such as stress and depression are likely to influence the outcomes of weight management, which calls for effective stress management strategies, mindfulness, meditation, and proper sleep hygiene, all of which encourage integrative and healthy weight loss. Therefore, the integrative weight loss program offers a structured roadmap that would enable individuals to achieve actual results both in the short term and in the long run as they develop lifelong habits that foster enduring wellbeing.

1.8. Duration: 30-90 Days

The program is designed to run for 30-90 days, during which a strategic and structured framework is put in place to ensure that individuals are able to achieve immediate results while allowing them adequate time to internalize and adopt desirable habits that will contribute to lifelong healthy weight management. The first 30 days provide the foundation for the program as it introduces the participating individuals to the principles, exercise routines, and nutritional guidelines that they will be expected to follow throughout the implementation of this program [11]. During this phase, the weight loss journey begins with clear routines and meal plans being set out, which allows individuals to adapt to the changes being introduced in their lives. Subsequently, the

next 60 days will see the program participants delve deeper into activities that establish individualized adjustments, engage in physical activities that are a bit more challenging, and develop a better understanding of their nutritional choices as well as the impact of these choices on their health [14]. This period ensures that individuals are able to achieve meaningful lifestyle changes, which require time to adapt and reinforce without causing significant disruptions to a person's life.

During the 90-day timeframe, those participating in the program will be able to achieve tangible benefits of their efforts as much as they will develop and adopt lifelong habits that will promote their wellbeing in the long-term. This program is developed with the understanding that individuals are likely to resist change, and rushing the program could see some people give up due to fatigue or other complications [3]. Therefore, the program incorporates a three-month structure that aims at striking the right balance between achieving immediate results and guaranteeing sustainable transformation. This way, individuals will not only lose excess body weight but also adopt health-conscious practices that will last for better health outcomes.

1.9. Holistic Approach Components

The main components of the integrative weight loss program have been cautiously curated in a manner that encompasses the entirety of the wellbeing of a person. It recognizes the fact that weight loss should not be achieved through quick fixes but instead involves a journey that entails mental, emotional, and physical exercise aspects [17]. By exploring the nutritional, physical activity, environmental, and mental well-being aspects, it becomes possible to determine how individuals can maneuver the complexities involved in weight management initiatives. Addressing these holistic components of the program will ensure that the program creates synergy to facilitate weight loss and cultivate sustainable changes in lifestyle practices. This will contribute to the promotion of a sense of overall wellness and a positive self-image for those seeking to lose weight [18]. As a result, those involved in the program will be willing to engage in a transformative journey that not only focuses on the weighscale figures but also fosters a more balanced lifestyle characterized by enduring health and wellbeing.

1.9.1. Nutrition

It is the objective of every individual to ensure that they eat a healthy diet that not only caters to their daily energy requirements by also promotes their wellbeing in the long-term. The nutritional aspect aims at ensuring that individuals adopt healthy food consumption that promotes the attainment of a healthy lifestyle [12]. The program focuses on ensuring that the participants understand the importance of consuming micronutrients and macronutrients. The main micronutrients that are required in the body include vitamins and minerals, while macronutrients include proteins, carbohydrates, and fats. The objective of the program is to ensure that individuals consume wholesome and nutrient-dense food products. This requires individuals to incorporate items such as fruits, lean proteins, whole grains,

and vegetables into their meal plans. While the meal plans proposed here can be applied by individuals as desired, it is more important to ensure that such plans are tailored to suit individual needs, which may vary based on activity level, age, and gender, among other factors. In addition, it is important to practice portion control as this prevents overeating, which could result in excessive weight gain [7]. In addition, practicing mindfulness in eating enhances awareness among individuals as they should be able to identify hunger cues as much as they should know when they are satisfied. The goal of the program is to provide a dietary plan that is suitable both in the short term and to encourage a sustainable approach to nutrition that individuals should be able to maintain beyond the duration of the program [13].

1.9.2. Physical Activity

Participation in physical exercise plays a key role in ensuring that individuals can maintain a healthy lifestyle. However, with the increased adoption of a sedentary lifestyle, only a few people are able to engage in physical activity either due to a lack of the necessary facilities, such as playgrounds and jogging tracks, or busy work schedules that hinder them from engaging in physical exercise. Focusing on physical activity will ensure that the program provides a comprehensive and adaptable plan that will enable individuals to achieve appropriate fitness levels [19]. The program aims to encourage activities such as cardiovascular exercise, flexibility exercise, and strength training. Cardiovascular exercise involves activities such as walking, cycling, and running, which are aimed at enhancing calorie expenditure in the body for better cardiovascular health [20]. Flexibility and balance exercises are aimed at ensuring that individuals improve their functional fitness, enhance mobility, and minimize the risk of injuries through activities such as stretching routines, yoga, and stability exercises. These activities are aimed at enhancing the functional fitness of an individual and enhancing their health [11]. The program is designed to ensure that individuals achieve gradual progression and consistency, which is not only essential for healthy weight loss but also enables them to develop sustainable exercise routines that align with individual preferences and lifestyles.

1.9.3. Environment

The environment plays a key role in influencing the lifestyle choices made by individuals. The integrative weight loss program aims to ensure that individuals are able to assess and make necessary modifications to their surroundings in a manner that supports the development of healthy habits [15]. These strategies include the creation of a home environment where individuals adopt nutritious eating, avoid junk foods, and focus on improving the consumption of healthy food options. In addition, the program aims to address workplace dynamics that encourage a sedentary lifestyle by promoting movement and encouraging the creation of a work environment that uses ergonomic setups for better health outcomes [21]. By emphasizing the importance of addressing environmental factors, it becomes possible to ensure that individuals can adjust their behaviors and make conscious choices to modify their environment in a manner

that aligns with the set health and weight loss objectives.

1.9.4. Mental Well-Being

Mental wellbeing is usually overlooked when exploring solutions to the problem of obesity and overweight. Recognizing the fact that there is a link between mental and physical health plays a crucial role in ensuring that individuals are taking the proper steps to address the problem. Over the years, stress has been known to be a significant contributor to the problem of overweight and obesity, as it causes individuals to overeat [1]. Therefore, learning about stress management techniques goes a long way in ensuring that individuals are taking the right steps to avoid stress eating. These techniques include deep breathing exercises, meditation, and yoga, among others, which are aimed at ensuring that the impact of stress on people's eating behaviors can be minimized [21].

On the other hand, mindfulness practices are aimed at encouraging people to be attentive and make conscious decisions when choosing the food to eat. This ensures that individuals develop healthy relationships with the food they eat as much as it helps mitigate emotional eating. Individuals who practice mindfulness are able to develop and implement effective coping mechanisms as well as self-reflection, which are essential in promoting healthy food consumption behaviors [13]. Individuals who develop a strong self-image are also able to develop an effective coping mechanism that promotes the attainment of healthy weight outcomes. In the long-run, this ensures that individuals have the proper mental well-being that enables them to achieve their weight management goals and cultivate a resilient mindset that is responsible for effective and emotional mental wellbeing.

1.10. Nutrition Plan

The nutrition plan is designed to ensure that individuals have a comprehensive and sustainable approach through which they can achieve healthy eating. The plan emphasizes the importance of maintaining an appropriate balance between micronutrients and macronutrient intake [20]. This will ensure that individuals can avoid restrictive diets while encouraging the inclusion of a diverse range of nutrient-dense foods. It also discourages the consumption of unhealthy food options such as junk and processed food products from fast food outlets. The individualized meal plans take into consideration various factors such as age, gender, and activity level, which aim at ensuring that the level of caloric intake aligns with the weight loss goals of a person [14]. In addition, the nutrition plan emphasizes portion control as a way of preventing overeating, while meal timing is strategically structured to optimize energy levels throughout the day.

The plan does not only seek to address the quantity of food but also underscores the importance of mindful eating as this goes a long way towards promoting healthy consumption behaviors. It also promotes awareness of hunger and satiety cues to prevent unnecessary consumption of food, which could eventually lead to excessive weight gain and obesity [12]. By fostering a positive and sustainable relationship with food, the nutrition plan seeks to equip individuals with the tools and knowledge they need to make informed dietary choices [13]. In addition, this lays the foundation for long-term weight management and overall well-being through healthy food choices that not only last during the program duration but also become part of their lifestyle.

1.11. Balanced Diet Principles

The guiding principles of the program aim at promoting the consumption of a balanced diet as well as raising awareness of the three main macronutrients—fats, proteins, and carbohydrates. It also emphasizes the importance of essential micronutrients that should be found in a healthy diet. In order to offer long-lasting energy and control blood sugar levels, individuals are advised to consume complex, fiber-rich forms of carbohydrates such as whole grains, fruits, and vegetables [20]. Lean foods like chicken, fish, lentils, and dairy products are considered the most effective sources of proteins for individuals seeking to lose weight as much as they are necessary for the upkeep and repair of muscles. Healthy fats can also be obtained from foods like avocados, almonds, and olive oil. These facts are essential for hormone balance and nutritional absorption. By placing a strong emphasis on these macronutrients, one can promote satiety and a balanced energy intake [17]. this goes a long way in lowering the risk of consuming too many calories, which can be unhealthy once they are accumulated in the body as they could lead to excessive weight gain.

The principles of a balanced diet aim at encouraging the consumption of a variety of micronutrients, including vitamins and minerals. These micronutrients are vital for optimum physiological performance, growth, and development. Vitamins can be obtained from a wide range of fruits and vegetables, while minerals come from a variety of food groups, such as whole grains and lean meats [17]. The program encourages people to adopt a whole-foods-based approach to nutrition, ensuring that they move away from processed or refined foods and consume whole, nutrient-dense foods. By following these guidelines, individuals will not only be able to meet their dietary needs but also create the foundation for long-term weight loss and improved health outcomes through consumption habits that can be continued over time [12].

1.12. Macronutrients and Micronutrients

Macronutrients for a fundamental component of every diet as they provide the energy we need to sustain the normal functions in the body. The integrative weight loss program aims at ensuring that individuals obtain all three primary macronutrients, namely proteins, carbohydrates, and fats. Proteins are used in maintaining and repairing the muscles as well as supporting cellular functions. The primary sources of proteins, as recommended by the program, include legumes, fish, poultry, and dairy products. These are not only needed to improve muscle health during physical exercise but also for fullness once they are eaten. Carbohydrates are a key source of energy in the body [19]. The program recommends the use of carbohydrates obtained from sources such as fruits, whole grains, and vegetables, which are key

ingredients in the meal plans. Complex carbohydrates are needed in the body to supply a constant source of energy while ensuring stability in the levels of blood sugar. Healthy fats are essential in ensuring that nutrients can be absorbed in the body as well as enhancing hormone regulation [20]. The sources of healthy fats include avocados, olive oil, and nuts, all of which are helpful in promoting good health and effective weight management.

On the other hand, micronutrients are the essential vitamins and minerals that are needed to sustain physiological functions. The program recommends that individuals should incorporate diverse micronutrients in their diet as this is essential in supporting overall health. Vitamins A, C, D, and we are essential for healthy bones and strong immunity and serve as antioxidants in the body. Iron, calcium, potassium, and magnesium are vital minerals that are needed to support a number of physiological functions. These minerals enhance muscular contraction, bone density, and oxygen transfer in the body. To guarantee a rich intake of vitamins, individuals need to eat colorful fruits and vegetables. Some of the food groups that are rich sources of minerals include whole grains and lean meats [19]. These are essential for optimal health and overall well-being as much as they are needed to promote effective weight management.

1.13. Meal Planning

Meal planning is essential as it allows individuals to make the right choices and avoid random decisions that could see them eating unhealthy food products. Being able to plan ensures that one does not get overwhelmed thinking about what to eat, which could result in making wrong choices. It is, therefore, important to spend some time developing a rough plan of what one should eat for each meal [17]. This ensures that one is able to make healthier food choices and reduces the likelihood of impulsive dinner takeouts from fast food outlets. In addition, a meal plan ensures that one is able to shop for the right ingredients without having to make multiple trips to the grocery store every week to get the items they require. Having a shopping list ensures that one does not engage in impulsive buying, which could be financially draining and deter the efforts to lose weight.

1.13.1. Daily Caloric Intake

For effective weight loss, the meal plan recommends a calorie level of 1,500 per day, which is highly effective in facilitating weight management. Conversely, these calorie levels can also be modified to allow for reduction or increase ranging between 1,200 calories per day to 2,000 calories per day based on an individual's calorie requirement and satiety levels. The level of calorie requirement may vary based on the age, activity level, and gender of an individual [20]. Consuming an appropriate calorie level ensures that one has the calories they need to sustain their energy while at the same time ensuring that one does not accumulate excess calories that could lead to obesity or overweight [1].

1.13.2. Meal Timing

Proper meal timing is essential as it ensures that individuals consume the food they need on time. In order to do this, it

becomes important for a person to observe and listen to their hunger and satiety cues. This will ensure that one does not eat too many times a day to interfere with their weight loss goals [16]. In addition, one should avoid taking too long in between meals as this could lead to starvation, which could trigger hormonal reactions that could lead to weight gain as a person may need to eat a lot more in the next portion. Therefore, it is essential to observe time and know when to take each meal, be it breakfast, lunch, or dinner, as well as the snacks taken in between the meals [3]. The main goal should be to ensure that one maintains the right energy levels that would help them continue performing the recommended physical exercises in order to achieve healthy weight management.

1.13.3. Portion Control

Portion control is another key concept that needs to be taken into consideration when looking to lose weight. This is mainly because an individual needs to consume an appropriate portion that matches their calorie requirements [8]. The meal plan that is provided offers the required portions for each meal, which will ensure that individuals eat the right amount of food and appropriate proportions for all micronutrients and macronutrients [19]. This will go a long way in enhancing healthy development and success in their journey to achieve weight loss goals. Following the recommended meal plan will ensure that the participants proceed in the right direction as much as it minimizes the chances of a relapse, which could see them struggle with weight gain all over again.

1.14. 30-90 Days Meal Plans

Having a meal plan is essential in ensuring that individuals make the right decisions when it comes to choosing what to eat or drink. The 30-to-90-day meal plan below seeks to provide an overview of the meals that one should consider in order to enhance weight management. The meal plan also offers recipes with the ingredients needed to make a perfect meal to keep you full and satisfied all day long. As seen in the meal plan, fruits and vegetables are essential and should be included in the meals for proper nutrition and faster weight loss [16]. The meal plans provided focus on the first 30 days, ensuring that the individuals using the meal plan make the right consumption choices. These meal plans can be duplicated over the remaining 60 days and beyond to ensure that individuals are making the right progress toward enhancing weight management.

1.15. Weekly Menus

1.15.1. Week 1 Meal Plan: To enhance weight loss, it is recommended that individuals should start the first week by making healthy food choices. For breakfast, a Greek muffintin omelet, Spinach, peppers, and feta would be excellent choices throughout the week. For lunch, it is recommended that one should have Brussels sprouts salad and chickpeas throughout most days of the week as they provide adequate energy and enhance satiety [17]. The preparation of these meals should focus on ensuring that the quality and nutritional value of the meal are maintained for good health. Below is a meal plan for the 7 days of the first week with

calorie targets for each meal.

Day 1:

Breakfast: Targeting 300 calories

- 2 Scrambled eggs
- 1 serving of Spinach
- A handful of raspberries

Morning snack: Target 270 Calories

- Small cup -240 grams of unsalted dried almonds
- 1 cup of blackberries

Lunch: Target 480 calories

- 2 pieces of roasted tuna fish
- 1 serving of mason jar power salad
- Chickpeas

Evening Snack: Target 130 calories

• 1 fresh pear - large

Dinner: Target 370 calories

- 1 serving of grilled salmon with peppers
- ½ cup boiled brown rice

The daily calorie target for the first day is 1550 calories with 150g carbohydrates, 90g protein, 70g fat, 40g fiber, and around 1200mg sodium.

Day 2:

Breakfast: 290 calories

- 1 cup of low-fat plain Greek yogurt.
- 1 small cup of raspberries.

Morning snack: 270 calories

- 1 cup of blueberries
- 3 tablespoons of chopped walnuts.

Lunch: 340 calories

- A small cup of Crunchy chickpeas
- 1 serving of Brussels sprouts salad.

Evening snack: 100 calories

• 1 medium-sized apple.

Dinner: 480 calories

- 1 serving of grilled chicken frites
- 1 glass of fresh fruit juice
- 1 serving of Guacamole Chopped Salad

The total calorie target for the day is 1480 calories with 160 g carbohydrates, 40 g fiber, 78 g protein, 72 g fat, and 1220 mg sodium.

Day 3:

Breakfast: 280 calories

- 1 medium peach
- 1 serving Greek Muffin-Tin Omelets with peppers

Morning snack: 284 calories

- 1 cup of low-fat plain yogurt
- 2 Tbsp. chopped walnuts
- 1/4 cup blueberries

Lunch: 340 calories

- Small cup of crunchy chickpeas
- 1 serving Brussels Sprouts Salad

Evening snack: 165 calories

- 7 walnut halves
- 1 medium-sized peach.

Dinner: 540 calories

- 1 serving Grilled Eggplant
- 1 serving Cucumber Avocado Salad

The total calories for the day are 1585 calories with 149 g carbohydrates, 38 g fiber, 72 g protein,

78 g fat, and 1270 mg sodium.

Day 4:

Breakfast: 284 calories

• 1 serving Greek Muffin-Tin Omelets with peppers

Morning snack: 240 calories • 1 cup of low-fat plain yogurt

• ¼ cup blueberries Lunch: 340 calories

• Small cup of crunchy chickpeas

• 1 serving Brussels Sprouts Salad

Evening snack: 65 calories • 1 medium-sized apple.

Dinner: 570 calories

• 1 serving Grilled Chicken Tacos

• 1 serving Guacamole Chopped Salad

The total calories for the day are 1527 calories with 147 g carbohydrates, 47 g fiber, 79 g protein, 73 g fat, and 1300 mg sodium.

Day 5:

Breakfast: 300 calories

• 1 serving of Spinach, Peanut Butter Banana Smoothie

• I medium-sized peach. Morning snack: 280 calories

• 1 cup of low-fat plain yogurt

• ¼ cup blackberries

• 2 tablespoons of chopped walnuts.

Lunch: 370 calories

• 1 serving Brussels Sprouts Salad

· A handful of crunchy chickpeas

Evening snack: 90 calories

• 1 small apple

Dinner: 490 calories • 1 serving of Chicken Caesar salad

• 1 serving of Guacamole Chopped Salad

The total calories for the day are 1530 calories with 116 g carbohydrates, 92 g protein, 79 g fat, 32 g fiber, and 1,483 mg sodium.

Day 6:

Breakfast: 294 calories

• 1 serving Spinach Egg Scramble Morning snack: 248 calories

• 1/4 cup of unsalted dry-roasted almonds

• 1 cup of blackberries Lunch: 390 calories

• 1 serving of Chicken Caesar Pasta Salad

• A quarter cup of crunchy chickpeas

Evening snack: 110 calories

• 1 large apple Dinner: 470 calories

• 1 serving Everything Bagel Avocado Toast

• 1 oz. slice of whole-wheat baguette

1 serving of Guacamole Salad

The total calories for the day are 1,594 calories, 87 g protein, 129 g carbohydrates, 37 g fiber, 73 g fat, 1,490 mg sodium.

Day 7:

Breakfast: 280 calories

• 1 serving Muesli.

• A handful of Raspberries. Morning snack: 220 calories

• 1 cup of low-fat plain yogurt

• A half cup of blackberries

Lunch: 378 calories

• 1 serving of Chicken Caesar Pasta Salad

• A quarter cup of crunchy chickpeas

Evening snack: 90 calories • A half cup of blueberries

Dinner: 470 calories

• 1 serving of Spring Green Frittata

• 1 serving of Guacamole Salad

The total calories for the day are 1487 calories with 89 g protein, 36 g fiber, 75 g fat, 133 g carbohydrates, and 1,485 mg sodium.

1.15.2. Week 2 Meal Plan: The main goal in week 2 is to prepare meals that are rich in protein to enhance muscle development while maintaining the same level of calorie intake as that of week 1. During most of the days in week 2, the main meal to be taken during lunch is Spicy Slaw Bowls with Shrimp and Edamame.

Day 8:

Breakfast: Targeting 320 calories

• 1 serving of Spinach, Peanut Butter, and Banana Smoothie

• 1 medium peach

Morning snack: Target 210 Calories

• 1 cup of blackberries

• Small cup -240 grams - of unsalted dried almonds

Lunch: Target 380 calories

• 1 serving Spicy Slaw Bowls with Shrimp

• 2 plums

Evening Snack: Target 198 calories

• 1 fresh pear

• 10 walnut halves

Dinner: Target 410 calories

• 1 serving of Chicken and Veggie Fajitas

Creamy Garlic Dressing

The daily calorie target for the first day is 1520 calories with 89 g protein, 123 g carbohydrates, 41 g fiber, 79 g fat, and 1240 mg sodium.

Day 9:

Breakfast: 300 calories

• 1 cup of low-fat plain Greek yogurt.

• 1 small cup of raspberries.

Morning snack: 270 calories

• 1 cup of blueberries

• 3 chopped walnuts.

Lunch: 340 calories

· A small cup of Crunchy chickpeas

• 1 serving of Brussels sprouts salad.

Evening snack: 100 calories 1 medium-sized apple. Dinner: 480 calories

• 1 serving of grilled chicken frites

• 1 glass of fresh fruit juice

• 1 serving of 1 serving Everything Bagel Avocado Toast

The total calorie target for the day is 1530 calories with 170 g carbohydrates, 47 g fiber, 79 g protein, 70 g fat, and 1230 mg sodium.

Day 10:

Breakfast: 320 calories

• 1 serving of Spinach, Peanut Butter Banana Smoothie

• 1 medium peach

Morning snack: 200 calories

• 1 cup of blueberries

Small cup of crunchy chickpeas

• 1 serving of Spicy Slaw Bowls with Shrimp

Evening snack: 165 calories

• 12 walnut halves

• 1 small cup of raspberries.

Dinner: 540 calories

• 1 serving Grilled Chicken and Veggie Fajitas

• 1 serving Cucumber and Avocado Salad

The total calories for the day are 1525 calories with 149 g carbohydrates, 43 g fiber, 82 g protein, 77 g fat, and 1280 mg sodium.

Day 11:

Breakfast: 284 calories

• 1 serving of Greek Muffin-Tin Omelets with peppers

• 2 plums

Morning snack: 240 calories
• 1 cup of low-fat plain yogurt

¼ cup blueberriesLunch: 340 caloriesA small cup of peanuts

• 1 serving of Spicy Slaw Bowls with Shrimp

Evening snack: 365 calories • 1 cup of blackberries.

• 18 walnut halves Dinner: 598 calories

• 1 serving of Grilled Flank Steak with Tomato Salad

• 1 serving of Everything Bagel Avocado Toast

The total calories for the day are 1627 calories with 148 g carbohydrates, 44 g fiber, 72 g protein, 70 g fat, and 1340 mg sodium.

Day 12:

Breakfast: 310 calories

• 1 cup of low-fat plain Greek yogurt

I medium-sized peach.

4 walnuts

Morning snack: 280 calories
• 1 cup of low-fat plain yogurt

¼ cup blackberries

• 2 tablespoons of chopped walnuts.

Lunch: 370 calories

• 1 serving of Spicy Slaw Bowls with Shrimp

A handful of crunchy chickpeas
Evening snack: 110 calories
1 medium-sized apple

Dinner: 430 calories

• 1 serving of Greek Summer-Squash Grilled Pizza

• 1 serving of Guacamole Chopped Salad

The total calories for the day are 1570 calories with 116 g carbohydrates, 92 g protein, 79 g fat, 32 g fiber, and 1,483 mg sodium.

Day 13:

Breakfast: 294 calories

• 1 serving Spinach Egg Scramble Morning snack: 248 calories

• 1/4 cup of unsalted dry-roasted almonds

• 1 cup of blackberries Lunch: 390 calories

1 serving of Chicken Caesar Pasta Salad

1 cup of crunchy chickpeas Evening snack: 110 calories

• 1 large apple Dinner: 470 calories

• 1 serving Everything Bagel Avocado Toast

• 1 oz. slice of whole-wheat baguette

• 1 serving of Guacamole Salad

The total calories for the day are 1,594 calories, 87 g protein, 129 g carbohydrates, 37 g fiber, 73 g fat, 1,490 mg sodium.

Day 14:

Breakfast: 280 calories

• 1 cup of low-fat plain Greek yogurt.

• A handful of Raspberries. Morning snack: 80 calories

• ¼ cup blackberries Lunch: 378 calories

• 1 serving of Spicy Slaw Bowls with Shrimp and Edamame

• A quarter cup of crunchy chickpeas

Evening snack: 90 calories
• A half cup of blueberries

• 3 plums

Dinner: 520 calories

1 serving of Chicken Pesto Pasta with Asparagus

• 1 serving of Guacamole Salad

The total calories for the day are 1527 calories with 84 g protein, 46 g fiber, 71 g fat, 143 g carbohydrates, and 1,385 mg sodium.

1.15.3. Week 3 Meal Plan: The goal this week is to maintain an appropriate calorie level as in the previous weeks, ranging between 1400 and 1700 calories. During this week, we will focus on preparing Spinach and Strawberry Meal-Prep Salad for lunch, while the breakfast will mainly be cinnamon roll overnight oats.

Day 15:

Breakfast: 320 calories

• 1 serving of Spinach, Peanut Butter Banana Smoothie

• 1 medium peach

Morning snack: 200 calories

• 1 cup of blueberries

Lunch: 347 calories

· Small cup of crunchy chickpeas

1 serving of Spicy Slaw Bowls with Shrimp

Evening snack: 165 calories

• 12 walnut halves

• 1 small cup of raspberries.

Dinner: 540 calories

serving Grilled Chicken and Veggie Fajitas

• serving Cucumber and Avocado Salad

The total calories for the day are 1525 calories with 149 g carbohydrates, 43 g fiber, 82 g protein, 77 g fat, and 1280 mg sodium.

Day 16:

Breakfast: 310 calories

• 1 cup of low-fat plain Greek yogurt.

• 1 serving of Cinnamon Roll Overnight Oats.

Morning snack: 80 calories

• 1 cup of blueberries

Lunch: 340 calories

• 1 Small cup of Crunchy chickpeas

• 1 serving of Spinach Strawberry Meal-Prep Salad.

Evening snack: 280 calories

• 1 cup blackberries.

• 28 unsalted dry-roasted almonds

Dinner: 480 calories

• 1 serving of Chicken, Brussels Sprouts

• 1 glass of fresh fruit juice

• 1 serving of mushroom salad

The total calorie target for the day is 1578 calories with 184 g carbohydrates, 49 g fiber, 74 g protein, 71 g fat, and 1200 mg sodium.

Day 17:

Breakfast: Targeting 304 calories

1 serving of Spinach and 2 scrambled eggs

A half cup of raspberries

Morning snack: Target 220 Calories

• 1 cup of blackberries

• Small cup -240 grams - of unsalted dried almonds

Lunch: Target 380 calories

• 1 serving of Green Salad with Edamame and Beets

• 4 plums

Evening Snack: Target 240 calories

• 10 walnut halves

• 1 fresh peach

Dinner: Target 410 calories

• 1 serving of grilled salmon and Veggie Fajitas

• Half a cup of cooked brown rice.

The daily calorie target for the first day is 1512 calories with

90 g protein, 132 g carbohydrates,

43 g fiber, 74 g fat, and 1239 mg sodium.

Day 18:

Breakfast: 320 calories

• 1 serving of Cinnamon Roll Overnight Oats

• 4 plums

Morning snack: 240 calories 1 cup of low-fat plain yogurt

1/4 cup blueberries Lunch: 340 calories

A small cup of peanuts

• 1 serving of Spicy Slaw Bowls with Shrimp

Evening snack: 365 calories

• 1 cup of blackberries.

• 18 walnut halves

Dinner: 598 calories

• 1 serving of Grilled Chicken Tacos with Slaw

• 1 serving of Everything Bagel Avocado Toast

The total calories for the day are 1648 calories with 149 g carbohydrates, 42 g fiber, 70 g protein, 74 g fat, and 1300 mg sodium.

Day 19:

Breakfast: 310 calories

• 1 cup of low-fat plain Greek yogurt

• I medium-sized peach.

• 4 walnuts

Morning snack: 280 calories

• 1 cup of low-fat plain yogurt

• 1/4 cup blackberries

• 2 tablespoons of chopped walnuts.

Lunch: 370 calories

1 serving of Spinach and Strawberry Meal-Prep Salad

A handful of crunchy chickpeas Evening snack: 210 calories • 1 medium-sized apple • 20 unsalted dry almonds

Dinner: 430 calories • 1 serving of Spring Green Frittata

• 1 serving of Guacamole Chopped Salad

The total calories for the day are 1670 calories with 126 g carbohydrates, 98 g protein, 74 g fat, 37 g fiber, and 1,280 mg sodium.

Day 20:

Breakfast: 294 calories

• 1 serving Spinach Egg Scramble

Morning snack: 248 calories

• 1/4 cup of unsalted dry-roasted almonds

• 1 cup of blackberries

Lunch: 390 calories

• 1 serving of Veggie and Hummus Sandwich

• 1 medium peach

Evening snack: 110 calories

• 1 large apple - 4 almonds

Dinner: 470 calories

• serving of Peanut Zucchini Noodle Salad with Chicken

• serving of Citrus Vinaigrette

• cups of mixed salad greens

The total calories for the day are 1,534 calories, 84 g protein, 139 g carbohydrates, 39 g fiber, 74 g fat, 1,210 mg sodium.

Day 21:

Breakfast: 280 calories

- 1 cup of low-fat plain Greek yogurt.
- A handful of Raspberries. Morning snack: 80 calories
- ¼ cup blackberries

Lunch: 378 calories

- 1 serving of Spicy Slaw Bowls with Shrimp and Edamame
- A quarter cup of crunchy chickpeas

Evening snack: 90 calories
• A half cup of blueberries

• 3 plums

Dinner: 520 calories

- 1 serving of Chicken Pesto Pasta with Asparagus
- 1 serving of Guacamole Salad

The total calories for the day are 1527 calories with 84 g protein, 44 g fiber, 73 g fat, 142 g carbohydrates, and 1,305 mg sodium.

1.15.4. Week 4 Meal Plan:

Day 22:

Breakfast: Targeting 320 calories

- 1 serving of Spinach, Peanut Butter, and Banana Smoothie
- Greek Muffin-Tin Omelets.
- 1 medium peach

Morning snack: Target 210 Calories

- 1 cup of blackberries
- 1 medium cup of unsalted sun-dried almonds

Lunch: Target 380 calories

- 1 serving Spicy Slaw Bowls with Shrimp
- 1 medium peach

Evening Snack: Target 200 calories

- 1 fresh apple
- 10 walnut halves

Dinner: Target 480 calories

- 1 serving of Shrimp and Pepper Kebabs
- Grilled Red Onion Slaw
- Creamy Garlic Dressing

The daily calorie target for the first day is 1594 calories with 92 g protein, 138 g carbohydrates, 47 g fiber, 89 g fat, and 1380 mg sodium.

Day 23:

Breakfast: 300 calories

- 1 cup of low-fat plain Greek yogurt.
- 1 small cup of raspberries.

Morning snack: 270 calories

- 1 cup of blueberries
- 3 chopped walnuts.

Lunch: 340 calories

- A small cup of Crunchy chickpeas
- 1 serving of Brussels sprouts salad.

Evening snack: 100 calories

• 1 medium-sized apple.

Dinner: 480 calories

- 1 serving of grilled chicken frites
- 1 glass of fresh fruit juice
- 1 serving of 1 serving Everything Bagel Avocado Toast

The total calorie target for the day is 1530 calories with 170 g carbohydrates, 48 g fiber, 82 g protein, 74 g fat, and 1330 mg sodium.

Day 24:

Breakfast: 310 calories

- 1 serving of Spinach, Peanut Butter, and Banana Smoothie
- 1 medium apple

Morning snack: 214 calories

- 1 cup of blueberries
- 1 small cup of plain yoghurt

Lunch: 337 calories

- 1 Small cup of crunchy chickpeas
- 1 serving of Spicy Slaw Bowls with Shrimp

Evening snack: 175 calories

- 12 walnut halves
- 1 small cup of raspberries.

Dinner: 540 calories

- 1 serving Grilled Chicken and Veggie Fajitas
- 1 serving Cucumber and Avocado Salad

The total calories for the day are 1530 calories with 139 g carbohydrates, 44 g fiber, 83 g protein, 72 g fat, and 1320 mg sodium.

Day 25:

Breakfast: 284 calories

- 1 serving of Greek Muffin-Tin Omelets with peppers
- 2 plums

Morning snack: 240 calories

- 1 cup of low-fat plain yogurt
- 1 cup blueberries

Lunch: 540 calories

- 1 Small cup of peanuts
- 1 serving of Chicken Caprese Pasta Salad Bowls

Evening snack: 165 calories

- 1 cup of blackberries.
- 10 walnut halves

Dinner: 489 calories

- 1 serving of Grilled Flank Steak with Tomato Salad
- 1 serving of Cucumber Avocado Salad

The total calories for the day are 1630 calories with 144 g carbohydrates, $40 \, g$ fiber, $73 \, g$ protein, $71 \, g$ fat, and $1390 \, mg$ sodium.

Day 26:

Breakfast: 310 calories

- 1 cup of low-fat plain Greek vogurt
- 1 medium-sized peach
- 1 serving Raspberry-Kefir Power Smoothie

Morning snack: 280 calories

- 1 cup of low-fat plain yogurt
- 1/4 cup blackberries
- 2 tablespoons of chopped walnuts.

Lunch: 370 calories

- 1 serving of Chicken Caprese Pasta Salad Bowls
- A handful of crunchy chickpeas

Evening snack: 110 calories

1 medium-sized apple5 walnut halves

Dinner: 530 calories

- 1 serving of Grilled Chicken with Red Pepper-Pecan Sauce
- 1 serving of Guacamole Chopped Salad

The total calories for the day are 1670 calories, with 116 g carbohydrates, 92 g protein, 79 g fat,

32 g fiber, and 1,483 mg sodium.

Day 27:

Breakfast: 294 calories

• 1 serving of Raspberry-Kefir Power Smoothie

Morning snack: 248 calories

- 1/4 cup of unsalted dry-roasted almonds
- 1 cup of blackberries Lunch: 390 calories
- 1 serving of Chicken Caesar Pasta Salad
- 1 cup of crunchy chickpeas Evening snack: 110 calories

• 1 large apple Dinner: 470 calories

- 1 serving of Grilled Flank Steak with Tomato Salad
- 1 oz. slice of whole-wheat baguette
- 1 serving of Guacamole Salad

The total calories for the day are 1,594 calories, 87 g protein, 129 g carbohydrates, 37 g fiber, 73 g fat, 1,490 mg sodium.

Day 28:

Breakfast: 280 calories

- 1 cup of low-fat plain Greek yogurt.
- A handful of Raspberries.
 Morning snack: 80 calories
- ¼ cup blackberries Lunch: 378 calories
- 1 serving of Spicy Slaw Bowls with Shrimp and Edamame
- A quarter cup of crunchy chickpeas

Evening snack: 90 calories
• A half cup of blueberries

• 4 plums

Dinner: 520 calories

- 1 serving of Chicken Pesto Pasta with Asparagus
- 1 oz. slice of whole-wheat baguette
- 1 serving of Guacamole Salad

The total calories for the day are 1540 calories with 84 g protein, 42 g fiber, 70 g fat, 141 g carbohydrates, and 1,310 mg sodium.

1.15.5. Week 5 Meal Plan:

Day 29:

Breakfast: Targeting 320 calories

- 1 serving of Spinach, Peanut Butter, and Banana Smoothie
- 1 medium peach

Morning snack: Target 210 Calories

- 1 cup of blackberries
- A small cup of unsalted dried almonds

Lunch: Target 380 calories

- 1 serving of Chicken Caprese Pasta Salad Bowls
- 4 plums

Evening Snack: Target 198 calories

- 1 fresh apple
- 8 walnut halves

Dinner: Target 410 calories

- 1 serving of Chicken and Veggie Fajitas
- Creamy Garlic Dressing

The daily calorie target for the first day is 1528 calories with 93 g protein, 128 g carbohydrates,

44 g fiber, 84 g fat, and 1340 mg sodium.

Day 30:

Breakfast: 300 calories

- 1 cup of low-fat plain Greek yogurt.
- 1 serving of Greek Muffin-Tin Omelets with Peppers
- 1 small cup of raspberries.

Morning snack: 270 calories

- 1 cup of blueberries
- 4 chopped walnuts.

Lunch: 340 calories

- 1 Small cup of Crunchy chickpeas
- 1 serving of Brussels sprouts salad.

Evening snack: 100 calories

• 1 medium-sized apple.

Dinner: 480 calories

- 1 serving of Chicken Caprese Pasta Salad Bowls
- 1 glass of fresh fruit juice
- 1 serving of 1 serving Everything Bagel Avocado Toast

The total calorie target for the day is 1530 calories with 170 g carbohydrates, 47 g fiber, 79 g protein, 70 g fat, and 1230 mg sodium.

Day 31:

Breakfast: 320 calories

- 1 serving of Spinach, Peanut Butter, and Banana Smoothie
- 1 medium peach

Morning snack: 200 calories

• 1 cup of blueberries

Lunch: 347 calories

- Small cup of crunchy chickpeas
- 1 serving of Spicy Slaw Bowls with Shrimp

Evening snack: 165 calories

- 12 walnut halves
- 1 small cup of raspberries.

Dinner: 540 calories

- 1 serving of Greek Summer-Squash Grilled Pizza
- 1 serving Cucumber and Avocado Salad

The total calories for the day are 1538 calories with 142 g carbohydrates, 40 g fiber, 81 g protein, 72 g fat, and 1380 mg sodium.

1.16. Recipes and Cooking Tips

The provided meal plan for 31 days can be applied over the remaining days within 90 days of the program duration and beyond. This can be done by interchanging the provided menus of the days based on what is available to individuals' preferences. This is made possible by the fact that the

provided weekly and daily menus are aimed at ensuring that individuals maintain an appropriate calorie level within the range of 1500 calories, which is considered appropriate for faster weight loss. The recipes provided are also carefully selected to ensure that individuals achieve proper nutrition throughout the entire period, which will enable them to perform the recommended physical activities during the entire period and beyond [17]. Additionally, it is important to ensure that the food is prepared in the right way to avoid the addition of unnecessary ingredients that could compromise the attainment of the set weight goals. The preparation of food and cooking should not interfere with the nutritional value of the recommended menu items. As a result, the participants will be able to achieve their weight management goals both in the short term and in the long-term.

1.17. Physical Activity

Physical activity plays an important role in enhancing the success of the efforts to lose weight. The attainment of a healthy body weight requires individuals to combine a healthy diet and appropriate physical exercise that best suits them. Participation in regular physical activities is not only essential in enhancing calorie expenditure in the body [22], but it also facilitates the development of muscle mass and improves cardiovascular health. It also helps reduce the risk of chronic illnesses, including type 2 diabetes and cardiovascular diseases, as much as it offers various physiological advantages. Additionally, physical exercise has been known to lower stress, anxiety, and depressive symptoms among individuals. The program recognizes the need for physical exercise in maintaining weight loss and encouraging long-lasting lifestyle modifications after the first 30-90-day period. By highlighting the significance of a varied and pleasurable workout regimen customized to personal tastes and talents, the program guarantees that individuals not only lose weight but also develop a comprehensive outlook on fitness, which will promote longterm health and overall wellbeing.

1.18. Exercise Regimen

The proposed exercise regimen focuses on enhancing cardiovascular health, strength training, flexibility, and balance. Focusing on these areas will ensure that individuals achieve overall health even as they work to reduce their body weight.

1.18.1. Cardiovascular Exercises

The workout regimen focuses on encouraging individuals to engage in cardiovascular exercises based on the understanding that improving cardiovascular health requires individuals to burn excess calories. Participating in exercises such as jogging, cycling, swimming, and brisk walking are known to increase heart rate, metabolism, and overall endurance [22]. Cardiovascular exercises help promote weight loss by ensuring that the body is using stored fat as a source of energy while facilitating calorie expenditure. Additionally, they have a number of physiological advantages, such as strengthened heart function, expanded lung capacity, and elevated mood due to endorphin release.

1.18.2. Strength Training

Strength training is also a critical component that is proposed in the program as it focuses on ensuring that individuals are able to build lean muscles through participation in appropriate exercise. Some of the activities that individuals should engage in to enhance their body strength include resistance, bodyweight exercises, and weightlifting [22]. These are essential for increased metabolism, which is required to ensure that individuals are burning the excess calories in the body. People with larger muscles burn calories more effectively even when they are at rest. In addition, strength training helps to strengthen bone density, improve functional fitness, and improve body composition. By the end of the program, the participants should have a robust and well-toned physique as much as they will be able to achieve their weight loss goals.

1.18.3. Flexibility and Balance

Given the importance of holistic fitness, the program's exercise regimen also points to the importance of stability and flexibility training. Physical activities such as yoga and stretching routines are considered necessary in trying to enhance flexibility, promote joint health, and lower the chances of suffering injuries due to preventable falls. This is because flexibility and balance exercises seek to enhance the general coordination and stability of an individual by engaging in stability drills and functional movement exercises. These components of the exercise regimen are not only essential in promoting a well-rounded fitness routine. Still, they are also crucial to addressing the everyday physical health issues that may be overlooked by traditional weight management programs [22]. Participating in the holistic approach will ensure that individuals do not only lose weight but also enhance their physical well-being throughout their lives.

1.19. Incorporating Physical Activity into Daily Routine

Integrating physical activity into daily routines provides an effective and sustainable approach through which individuals can achieve long-term health. This is based on the understanding that sedentary lifestyles have their health implications and individuals should seek opportunities to engage in some form of physical activity at any time [22]. Such activities may include walking upstairs instead of taking the lift or elevator, taking short walks during work breaks, and engaging in workouts at home whenever there is an opportunity to do so. By establishing seamless integration between physical activity and daily routines, the program aims to ensure that individuals are not hindered from engaging in physical exercise by time constraints but rather make exercise a habit in their lives. This method does not only increase total energy expenditure but also cultivates a mentality change, making physical activity seem less like a chore and more like a pleasurable part of everyday life [17]. Additionally, this aligns with the goal of the program as it seeks to foster long-lasting lifestyle modifications, empower individuals to lead active lifestyles and enhance healthconsciousness even as they pursue weight loss.

1.20. The Role and Importance of Rest and Recovery

As in the case of any other activity, rest and recovery are essential as they provide an individual with time to rethink and improve their strategies based on the outcomes they have obtained so far. The attainment of a health weight should not focus soles on active efforts and exercise but also provide time for the body to regenerate and recover from the continuous workout [16]. Rest days provide the body with adequate time for the reparation and growth of lean muscles after a period of strenuous physical exercise. In addition, it is important to get adequate sleep as this helps in the regulation of hormones that control vital activities in the body, such as metabolism and appetite [5]. This has a direct impact on weight management outcomes and goes a long way in mitigating the stress levels that could hinder progress in the weight loss journey.

1.21. Mental Well-Being

Mental health has a key role in influencing how well individuals are willing to cooperate throughout the weight loss journey. The program emphasizes the importance of promoting mental well-being as a key to enhancing the attainment of the desired outcomes. This is mainly because the decisions about what to eat, how often to exercise, and general lifestyle habits are greatly influenced by the mental health status of an individual [10]. Individuals affected by stress, depression, or other mental health issues are incapable of making the right decisions when it comes to food choices. This could see them consuming unhealthy foods such as junk food and process foods that may compromise their goal of losing weight.

1.22. Stress Management

Stress management is a key factor that is needed in the process of achieving weight management goals. Techniques such as meditation and mindfulness play a key role in ensuring that individuals can monitor and control their emotional wellbeing and avoid stressed or depressive thoughts [22]. Stress has been known to be a common emotional eating trigger that causes individuals to gain weight rapidly. Therefore, the adoption of effective stress management techniques can help reduce the levels of stressrelated cortisol that could potentially impede the attainment of weight loss goals. It is, therefore, essential for a person to develop a positive relationship with food, have a positive perception of their body image, and develop a positive mindset that promotes self-compassion [18]. This way, individuals can avoid overindulgence and address stress, which in turn improves emotional and mental resilience as much as it enables individuals to get adequate sleep.

1.22.1. Mindfulness

Mindfulness aims at ensuring that individuals can avoid making unnecessary judgements about their current situation or the present moment. This allows them to develop self-awareness, which is needed to ensure that they can monitor their feelings, behaviors, and thoughts [13]. Mindfulness is needed in the weight loss journey as it ensures that individuals can reflect on their food consumption habits, which is required to prevent impulsive eating. It

enables people to develop non-judgmental awareness of their cravings, emotions, and behaviors towards food, which could potentially influence their ability to make healthy choices [16].

1.22.2. Meditation

On the other hand, meditation encourages individuals to engage in focused practices that enable them to nurture a calm and focused mental state. This enables people to learn how to handle stress more effectively, thereby enhancing the outcomes of their efforts to lose weight. Stress is likely to trigger hormonal reactions in the body that could easily lead to overindulgence or cause people to make poor dietary decisions [17]. Meditation offers an effective way of counteracting such reactions as it raises emotional resilience, lowers cortisol levels linked to stress, and improves the mental well-being of an individual.

1.23. Sleep Hygiene

The importance of good sleep hygiene cannot be overstated not only for those seeking to lose weight but also for those who want to achieve general wellbeing. The physical and emotional health of a person is dependent on whether they get enough sleep or not. Hormones that control hunger, metabolism, and stress levels are directly impacted by getting enough sleep to facilitate the restoration of these hormones, which directly impacts weight [18]. Decreased appetite for high-calorie foods and inability to make informed dietary decisions are likely to be a result of sleep deprivation. The circadian rhythm of a person can be easily upset by sleep deprivation, which could, in turn, lower the energy levels and make it harder to engage in physical exercise. Optimizing sleep quality not only facilitates the attainment of the set weight loss goals but also promotes the overall health and vitality of a person [22]. The program emphasizes the importance of sleep hygiene, which includes adhering to a regular sleep schedule, setting up a friendly environment to sleep, and minimizing screen time before bed, as this affects one's ability to get good sleep.

1.24. Building a Support System

Given the demanding and intensive nature of the program to lose weight, having a highly effective support system is essential as it ensures that individuals remain committed throughout the journey and achieve sustainable weight management even after the end of the program duration [23]. Such a support system serves as a source of encouragement, enhances accountability, and offers support when one is experiencing difficulties that could cause them to quit along the way. This is based on the understanding that the support system has the same goals as you and fosters a sense of community throughout the entire journey. The support system can be friends, colleagues seeking to lose weight, or family members who are able to enhance motivation, offer emotional support, and provide practical insights to help navigate the obstacles along the way [15]. It is these collective and supportive initiatives that help build long-term commitment, enhance resilience, and ensure that one is able to move beyond shedding off the extra pounds to cultivating a strong network that encourages positive changes in lifestyle

for the overall well-being of an individual.

1.25. Integrative Approach vs. Traditional Treatments

The holistic and integrative approach taken in this program differs from the traditional treatment methods in that it takes a more personalized and comprehensive approach to weight management without placing too much emphasis on calorie restrictions and physical exercise. The integrative approach recognizes the complex nature of weight management compared to the traditional treatments that tend to only focus on weight loss without addressing the underlying causes [22]. In addition, the integrative approach combines physical exercise, mental health, diet, and lifestyle alterations to generate holistic and long-lasting changes [10]. This way, individuals do not only lose weight but also engage in activities that improve their general health and well-being as it encourages health-conscious behaviors that continue beyond the program.

On the other hand, conventional therapies aimed at enhancing weight loss rely on prescription drugs such as peptide injections, which may achieve the weight loss goals but fail to adequately address the more comprehensive aspects of an individual's health [24]. In addition, the Integrative approach differs from the traditional treatment as it emphasizes the value of creating a support network, combining mindfulness and meditation, and developing the right sleep hygiene. All these factors add up to a more comprehensive and long-lasting approach to weight management, which is bound to enhance weight loss and overall health [21]. Most traditional treatments tend to have a limited focus, unlike the integrated approach that aims to provide a comprehensive, personalized, and long-lasting solution to weight loss by connecting physical, emotional, and mental health [15].

1.26. Overview of Current Prescription Treatments

Prescription treatments for weight management are only aimed at ensuring that individuals achieve their weight goals without considering the underlying factors. These treatments do not take into account the fact that those struggling with overweight and obesity are also likely to be at a high risk of chronic illnesses such as diabetes, kidney diseases, and cardiovascular diseases [25]. In addition, the treatments do not seek to address the mental well-being aspects of the weight management process mainly because they seek to offer quick fixes to individuals struggling with weight issues.3

1.26.1. Peptide Injections

Peptide injections are a common treatment that is used for weight management. The prescription treatment contains peptides that are capable of influencing the rate of metabolism and regulating appetitive once injected [24]. The peptides work by targeting specific receptors in the body, which could result in appetite reduction. These signaling molecules also work by increasing energy expenditure or enhancing the metabolism of fats in the body. Additionally, some peptides can play the role of hormones, which are capable of regulating hunger and satiety [26]. This ensures

that an individual consumes the right amount of food that would help them manage weight more effectively.

1.26.2. Ozempic

Ozempic, also commonly known as semaglutide, is an injection treatment that is commonly used in managing Type 2 Diabetes. Over the years, the treatment has received a lot of attention due to its ability to enhance weight loss [2]. Ozempic works by imitating the hormones that regulate blood sugar and helps facilitate weight reduction through a reduction in appetite levels as well as slowing down the rate at which the stomach is emptied. Maintaining the satiety levels ensures that individuals do not overeat, thereby enhancing weight loss. In addition, the medication can help ensure that individuals are making the right dietary decisions [2]. However, just like most conventional weight management treatments, the drug fails to consider the role of mental health and physical exercise in promoting healthy weight management.

1.26.3. Root Sculpt

The nutraceutical formulation was designed to help promote healthy weight loss by regulating the absorption of excess glucose calories, suppressing appetite, and increasing the rate of burning fats in the body. As a proprietary blend, the drug works effectively in reducing calories as it seeks to control and regulate the levels of glucose in the blood while at the same time increasing the breakdown of fatty acids. Some of the key ingredients in this medication include gvmnema Silvestre, ginger root, white kidney bean, valerian root, and InnoSlim [27]. Gymnema sylvestre works by inhibiting the absorption of sugar as it passes through the intestines, improving insulin sensitivity, reducing cravings for foods containing sugar, and acting as an appetite suppressant, thereby reducing the rate of food intake. Ginger root helps with appetite suppression as it affects hunger and satiety cues, results in improved digestion, and helps regulate blood sugar levels, which is better for appetite control and helps avoid sugary foods [27]. White kidney bean helps enhance weight loss by inhibiting the digestive enzyme alpha-amylase, reducing the level of absorption of calories, and regulating blood sugar as much as it increases the feelings of satiety and fullness, thereby preventing overeating [25]. Valerian root has been known to be a highly effective medication for stress alleviation. It promotes relaxation, which could result in better sleep patterns as much as it prevents emotional eating.

On the other hand, InnoSlim contains astragalus membranous, which is known for its metabolic support, reduction of inflammation, improved insulin sensitivity, and enhanced stress management. In addition, the drug contains Panax notoginseng, which is an element that is known for its effectiveness in regulating blood sugar, anti-inflammatory effects, enhanced metabolism of lipids, and better blood circulation [26]. As a result, root sculpt is able to work effectively when used as a supplement to facilitate weight loss.

1.27. Comparative Analysis: Effectiveness, Side Effects, and Long-Term Impact

The holistic approach taken by the integrative approach enables it to stand out for being particularly beneficial throughout the weight loss journey. The approach seeks to tackle both weight loss and the general well-being of an individual. It also takes an individualized strategy, which combines lifestyle changes, mental health, physical activity, and proper nutrition [10]. This demonstrates the encouraging outcomes it offers in supporting long-term weight control rather than focusing on achieving quick fixes to the problem. The integrative approach focuses on improving the overall health of an individual over the long run as it encourages lifestyle modifications that will continue even after the end of the program [17]. However, it is important to note that each person participating in the program may respond differently to it. The holistic lifestyle modifications introduced by the program are essential for long-term success in this endeavor.

On the other hand, traditional treatments such as peptide injections, Root Sculpt, and Ozempic tend to focus on providing quick fixes to the problem of weight management. The treatments target particular pathways that are linked to hunger, metabolism, lipid breakdown, and absorption of fat [28]. To some people, these treatments may help them reach their short-term objectives to shed some weight. However, there have been concerns regarding the longterm effects of using such treatments, as it has been alleged that they may have adverse impacts in the long term [2]. This is mainly because they do not require significant lifestyle adjustments, which is likely to compromise the long-term sustainability of weight loss that is obtained using the treatments [29]. Therefore, in choosing traditional therapies, individuals must carefully assess the advantages and setbacks of the selected option options by considering the side effects and long-term outcomes.

1.28. Transitioning from Traditional Treatments

The transition from traditional treatments requires a thorough assessment of individual requirements in order to formulate personalized nutrition plans, mental well-being practices, and diversified physical exercise routines. It is also essential to have adequate support systems composed of healthcare providers, lifestyle coaches, family members, and colleagues who play a key role in enhancing this transition as well as addressing individual needs [25]. The integration of holistic approaches during the transition helps create a sustainable strategy for weight management, promotes overall health, and minimizes overreliance on specific treatments that could potentially have long-term health effects.

1.29. Rahm Plan

The plan put forward by DR. Christina Rahm aims at enhancing the transition from traditional treatments and enhancing the adoption of modern and holistic approaches in weight management. Rahm's plan proposes the use of human biohacking to enhance weight management [6]. This is a technique that seeks to use lifestyle changes, technological solutions, and scientific methods in the efforts to optimize

the physical and mental well-being of an individual [30]. This approach encourages individuals to combine dietary changes and physical exercise, as well as gene editing and cybernetics, to enhance weight management. These strategies are capable of ensuring that individuals achieve physical, mental, emotional, and behavioral changes that positively impact their weight management outcomes [28]. Some of the biohacking breakthroughs include Clean Slate, Zero-in, Restore, Natural Barrier Support, and Give Me Back My Youth. Others include Relive greens, Immune Defense Shields, Ella Pure Reno, and Enviremware, all of which are under the Roots Brands and developed by nanotechnologists to help individuals struggling with various lifestyle diseases.

1.30. Gradual Reduction

A critical principle of the integrative approach lies in gradual reduction, which emphasizes the adoption of a systematic and long-term approach to weight management. This entails gradually altering lifestyle choices, exercise regimens, and eating patterns in order to avoid relying on traditional weight management techniques [27]. The gradual reduction approach helps individuals achieve success in the long run as it lets them gradually get used to new routines and behaviors. This approach raises the possibility of long-term weight loss and prevents abrupt alterations that might prove challenging to maintain for most people. Furthermore, encouraging a change in perspective from seeing weight loss as a temporary goal to a lifelong journey promotes a healthier connection with dietary practices and lifestyle decisions.

1.31. Monitoring Health Metrics

The ability to monitor health metrics is a key component of the integrated approach that seeks to track health measures in place and ensure that individuals improve their overall well-being while pursuing weight loss goals. In addition to weight loss, monitoring health metrics helps track body composition, blood pressure, cholesterol levels, and other indicators of good or deteriorating health [3]. It is, therefore, important to maintain a regular tracking schedule that can be used to identify any improvements, introduce modifications to the approaches taken where necessary, and recognize the progress being made along the way. The adoption of modern technology provides a key way through which individuals can monitor their health metrics including the level of exercise, blood glucose levels, and weight loss progress, among others [30]. This way, individuals are able to make informed decisions about their health and develop insightful conclusions about the effectiveness of the program.

1.32. Long-Term Plan: Beyond 90 Days

Following the completion of the 90-day program, the participants need to continue healthy eating routines and maintain the physical exercises that have proven helpful in facilitating weight loss. As the program demonstrates, long-term lifestyle adjustments are required to enable individuals to maintain weight loss rather than focusing only on short-term weight loss goals [21]. Building on the routines established during the initial phase, individuals should continue controlling portion sizes and consuming a wide range of nutrient-dense foods. Developing a well-

rounded eating strategy that takes personal preferences, environmental factors, and cultural influence can ensure that individuals focus on enhancing their health and wellbeing [9]. The program aims to ensure that individuals can make informed food choices, overcome obstacles, and make necessary modifications in their nutrition plans to meet the changing requirements without being trapped into believing that restrictive diets are the solution. Additionally, the program offers continuous assistance and tools that will guarantee continuous improvement and seek to address any potential challenges that could hinder the attainment of long-term success.

Integrating sustainable fitness regimens is given top priority in the long-term plan. It is suggested that participants engage in enjoyable physical activities so that they can incorporate fitness into their everyday lives. A combination of cardiovascular workouts, weight training, flexibility, and stability exercises, as well as mindful movement techniques and meditation, would go a long way in ensuring that individuals achieve long-term sustainability in their weight management efforts [3]. The main objective of having a longterm plan is to ensure that the weight-maintenance fitness program is flexible, enjoyable, and effective despite the circumstances that a person may be experiencing. The program advocates for the flexibility of exercises to fit a range of tastes, individual preferences, and life stages, given the dynamic nature of life across different stages. Through the promotion of a comprehensive and well-rounded approach to long-term well-being, the program will ensure that participants develop the skills and mentality that will enable them to maintain sustainable weight loss and enjoy healthier, happier, and more fulfilling lives by building healthier habits, routines, and having the right motivation [21].

1.33. The Importance of a Comprehensive Plan

A comprehensive plan is needed to ensure that the complex challenges involved in weight management can be addressed accordingly. Unlike the common assumption, losing weight is more complicated than just shedding some pounds. It is a process that involves a variety of lifestyle decisions, physical exercise, mental health, and dietary changes [10]. Therefore, a comprehensive plan should be able to consider the interrelated components and offer an effective framework that takes into consideration the unique needs, preferences, and challenges faced by each person in their effort to lose weight. The incorporation of such elements, as well as the creation of customized exercise regimens, stress reduction techniques, progressive dietary modifications, and continuous assistance, offer a holistic approach that guarantees individuals that they will not only meet their short-term weight reduction objectives but also develop sustainable lifestyle adjustments that will last longer [3]. The allencompassing strategy recognizes that effective weight management extends beyond the program duration to promote long-term well-being and reduce the risk of relapse to overweight and obesity and lays the groundwork for a more balanced and healthier lifestyle.

2. Conclusion

The integrative weight loss program proposed above stands out as the pathway to a lifechanging journey to long-term well-being. The program is highly effective in ensuring that individuals adopt a comprehensive approach that does not only focus on shedding the extra pounds but also seeks to introduce pertinent lifestyle changes, physical exercise, dietary adjustments, and mental health improvement as critical components of the weight management journey. The consumption of a healthy and balanced diet, implementation of individualized exercise regimens, mindfulness and meditation, and progressive lifestyle adjustments all work together to achieve lasting health and well-being outcomes. Therefore, the program offers a road map that will enable individuals to not only reach their weight loss objectives but also have a happier and more satisfying life.

As we embark on this journey to lose weight and achieve good health outcomes, I believe that the 30-90 days program should serve as the foundation of a lifetime dedication to good health and sustainable well-being. It is important for every participant utilizing the program to nurture the habits they learn and realize that this serves as the indicator of their commitment to achieving a healthier life [23]. It is, therefore, important to select healthy foods, remain committed to physical exercise, and focus on improving mental well-being since these are at the core of achieving a fulfilling and meaningful life. Additionally, it is essential to make good decisions that will have a positive impact on longterm health. Regardless of your present weight or health condition, it is important to realize that every day is an opportunity to make better decisions that could potentially improve your life. While it is possible that some people could achieve their weight reduction goals within 90 days, it is important to note that sustainability is the most important part of this journey. Therefore, it would be important to learn from the principles of the program and focus on building lasting health, commitment, resilience, and a life of good health, happiness, and satisfaction.

References

- ElSayed, N. A., Aleppo, G., Aroda, V. R., Bannuru, R. R., Brown, F. M., et al. (2023).
 8. Obesity and weight management for the prevention and treatment of type 2 diabetes: Standards of Care in Diabetes—2023. *Diabetes Care*, 46(Supplement_1), S128-S139.
- 2. Suran, M. (2023). As Ozempic's popularity soars, here's what to know about semaglutide and weight loss. *Jama*, 329(19), 1627-1629.
- 3. Wadden, T. A., Tronieri, J. S., Butryn, M. L. (2020). Lifestyle modification approaches for the treatment of obesity in adults. *American Psychologist*, 75(2), 235.
- Asbjørnsen, R. A., Wentzel, J., Smedsrød, M. L., Hjelmesæth, J., Clark, M. M., et al. (2020). Identifying persuasive design principles and behavior change techniques supporting end user values and needs in eHealth interventions for long-term weight loss maintenance: qualitative study. *Journal of Medical Internet Research*, 22(11), e22598.
- 5. Konstantinidi, M., Koutelidakis, A. E. (2019). Functional foods and bioactive compounds: A review of its possible

- role on weight management and obesity's metabolic consequences. *Medicines*, 6(3), 94.
- Bansal, M. (2023). Hacking Health: The Only Book You'll Ever Need to Live Your Healthiest Life. Penguin Random House India Private Limited.
- Bouzas, C., Bibiloni, M. D. M., Garcia, S., Mateos, D., Martínez-González, M. Á., Salas-Salvadó, J., ... PREDIMED-Plus Investigators. (2022). Desired weight loss and its association with health, health behaviors and perceptions in an adult population with weight excess: One-year follow-up. Frontiers in Nutrition, 9, 848055.
- 8. Ellwood, T. (2019). Inner alchemy of life: Practical magic for bio-hacking your body (Vol. 2). Taylor Ellwood.
- Saghafi-Asl, M., Aliasgharzadeh, S., Asghari-Jafarabadi, M. (2020). Factors influencing weight management behavior among college students: An application of the Health Belief Model. *PloS one*, 15(2), e0228058.
- Jones, R. A., Lawlor, E. R., Birch, J. M., Patel, M. I., Werneck, A. O., et al. (2021). The impact of adult behavioural weight management interventions on mental health: A systematic review and meta-analysis. *Obesity Reviews*, 22(4), e13150.
- 11. Ligibel, J. A., Bohlke, K., May, A. M., Clinton, S. K., Demark-Wahnefried, W., et al. (2022). Exercise, diet, and weight management during cancer treatment: ASCO guideline. *Journal of Clinical Oncology*, 40(22), 2491-2507.
- 12. Ehlert, J. (2021). Food consumption, habitus and the embodiment of social change: Making class and doing gender in urban Vietnam. *The Sociological Review, 69*(3), 681-701.
- Fuentes Artiles, R., Staub, K., Aldakak, L., Eppenberger, P., Rühli, F., et al. (2019). Mindful eating and common diet programs lower body weight similarly: Systematic review and meta-analysis. *Obesity Reviews*, 20(11), 1619-1627.
- 14. Bray, G. A., Ryan, D. H. (2021). Evidence-based weight loss interventions: individualized treatment options to maximize patient outcomes. *Diabetes, Obesity and Metabolism*, 23, 50-62.
- 15. Chai, L. K., Collins, C., May, C., Brain, K., See, D. W., et al. (2019). Effectiveness of family-based weight management interventions for children with overweight and obesity: an umbrella review. *JBI Evidence Synthesis*, 17(7), 1341-1427.
- Spring, B., Champion, K. E., Acabchuk, R., Hennessy, E. A. (2021). Self-regulatory behaviour changes techniques in interventions to promote healthy eating, physical activity, or weight loss: a meta-review. *Health Psychology Review*, 15(4), 508-539.
- 17. Tabesh, M. R., Maleklou, F., Ejtehadi, F., Alizadeh, Z. (2019). Nutrition, physical activity, and prescription of supplements in pre-and post-bariatric surgery patients: a practical guideline. *Obesity Surgery*, 29, 3385-3400.
- 18. Puhl, R. M., Himmelstein, M. S., Pearl, R. L. (2020). Weight stigma as a psychosocial contributor to obesity. *American Psychologist*, 75(2), 274.
- 19. Lundgren, J. R., Janus, C., Jensen, S. B., Juhl, C. R., Olsen,

- L. M., Christensen, R. M., ... Torekov, S. S. (2021). Healthy weight loss maintenance with exercise, liraglutide, or both combined. *New England Journal of Medicine*, 384(18), 1719-1730.
- 20. Paixão, C., Dias, C. M., Jorge, R., Carraça, E. V., Yannakoulia, M., de Zwaan, M., ... Santos, I. (2020). Successful weight loss maintenance: a systematic review of weight control registries. *Obesity reviews*, *2*1(5), e13003.
- 21. Lemstra, M., Bird, Y., Nwankwo, C., Rogers, M., Moraros, J. (2016). Weight loss intervention adherence and factors promoting adherence: a meta-analysis. *Patient preference and adherence*, 1547-1559.
- 22. Johns, D. J., Hartmann-Boyce, J., Jebb, S. A., Aveyard, P., Behavioural Weight Management Review Group. (2014). Diet or exercise interventions vs combined behavioral weight management programs: a systematic review and meta-analysis of direct comparisons. *Journal of the Academy of Nutrition and Dietetics*, 114(10), 1557-1568.
- 23. Birch, J. M., Jones, R. A., Mueller, J., McDonald, M. D., Richards, R., Kelly, M. P., ... Ahern, A. L. (2022). A systematic review of inequalities in the uptake of, adherence to, and effectiveness of behavioral weight management interventions in adults. *Obesity Reviews*, 23(6), e13438.
- 24. Bossart, M., Wagner, M., Elvert, R., Evers, A., Hübschle, T., Kloeckener, T., ... Konkar, A. (2022). Effects on weight loss and glycemic control with SAR441255, a potent unimolecular peptide GLP-1/GIP/GCG receptor triagonist. *Cell metabolism*, 34(1), 59-74.
- 25. Peckmezian, T., Garcia-Larsen, V., Wilkins, K., Mosli, R. H., Bin Dhim, N. F., John, G. K., ... Alqahtani, S. A. (2022). Microbiome-targeted therapies as an adjunct to traditional weight loss interventions: A systematic review and meta-analysis. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy, 3777-3798.
- 26. Jeong, D., Priefer, R. (2022). Anti-obesity weight loss medications: Short-term and long-term use. Life Sciences, 306, 120825.
- 27. Saibhavani, G., Kamalaja, T., Srilekha, K., Rani, R. N. (2020). Chapter-7 role of traditional foods for immunity boosting. Advances in Nutrition, 121, 66-77.
- 28. Cooper, I. D., Kyriakidou, Y., Petagine, L., Edwards, K., Elliott, B. T. (2023). Bio-hacking better health—Leveraging metabolic biochemistry to maximise healthspan. *Antioxidants*, *12*(9), 1749.
- 29. Enebo, L. B., Berthelsen, K. K., Kankam, M., Lund, M. T., Rubino, D. M., Satylganova, A., Lau, D. C. (2021). Safety, tolerability, pharmacokinetics, and pharmacodynamics of concomitant administration of multiple doses of cagrilintide with semaglutide 2• 4 mg for weight management: *a randomised, controlled, phase 1b trial. The Lancet, 397*(10286), 1736-1748.
- 30. Ghelani, D. P., Moran, L. J., Johnson, C., Mousa, A., Naderpoor, N. (2020). Mobile apps for weight management: a review of the latest evidence to inform practice. *Frontiers in endocrinology, 11, 412.*