

X **SIMPLY FIT**
OPTIMAL

Amber Benge

OVERVIEW



Congratulations on unlocking the key to your optimal health! Your Simply Fit results provide insights about your body that have never before been available. Since the discovery of the human genome in 2003, the technological advancements in genetics has allowed us to see the code of the human body and its functions. People often spend most of their lives learning how their behaviors and habits affect their health. It often takes many years of trial and error to find what works and this alone doesn't give us all the information we need. The Simply Fit report will provide you with actionable ways to improve your lifestyle for the most efficient path to your optimal health.

GENETICS WHAT WE TEST FOR

This test concentrates on the most researched and highly functional genetic markers that encode for fat sensitivity, insulin resistance, glucose balance, and your physiological response(s) to exercise. We provide results that are simplified, customized and easy to implement into your lifestyle. It works every time it is utilized, but only if you adjust your epigenetics to match your genetics. Its the most efficient (easiest) way to reach and maintain healthy and ideal body composition.

EPIGENETICS PROPER STIMULATION

Epigenetics is simply how your genetics interacts with the environment. Think of your genetics as tools, and epigenetics as how those tools are used. You can use tools in various ways but when you use them for their intended purpose, you produce the most efficient results. Epigenetics includes things like diet, exercise, nutrition and exposure to toxins and the sun. The epigenetic interaction, your lifestyle, gender and environment can influence the way your genes are stimulated, and therefore physically expressed throughout your body.

IMPLEMENTATION WAYS TO ADJUST

Your results provide guidelines the will help you create the most effective epigenetic environment to most efficiently stimulate your genetics to reach your optimal body composition. The closer to the ideal epigenetic environment specific to your genetics you can adhere to, the more efficient your body will function and the quicker you can achieve your goals and maintain ideal body composition. This report does not diagnose any health conditions or provide medical advice. Consult with a healthcare professional before making any major lifestyle changes or if you have any other concerns about your report.

DO, EAT, TAKE THE THREE SECTIONS



In your Do section, you will see which types of exercises are optimal for you along with the recommended frequency and duration of workouts. Many exercises can be modified to be low or high intensity so you have many options for optimizing the results of your workouts.



In your Eat section, you'll find your macronutrient breakdown, the most intuitive tool we've found for attaining that breakdown and a 7-day meal plan designed specifically for your genotype. We provide the best tool along with a 7-day kick-start meal plan to help you intuitively adjust your food intake to optimal levels while never resorting to counting calories.



In your Take section, you will find the supplement recommendation based on our genetic analysis.



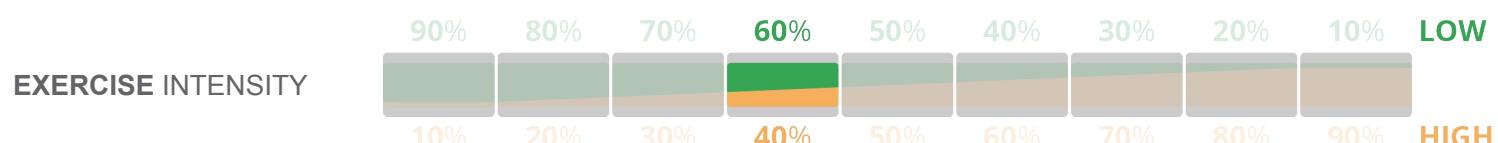
DO



OPTIMAL EXERCISE

Your optimal type of exercise is determined by your genetic receptors. Your body doesn't know what kind of exercise you are doing, but rather it responds to stimuli exercise creates. The stimuli created vary based on your heart rate during physical activity. The intensity level of the workout determines the type of stimuli and, as a result, the effectiveness of your workout.

Your genetic receptors indicate which type of exercise regimen is optimal for you – one that is mostly low intensity, one that is primarily high intensity or one that combines both low and high intensity workouts. Implementing an exercise program appropriate for your receptors will have a significant impact not only on your body composition, but also on recovery, energy level and cravings.



The above graphic displays the percentage of the two types of exercise LOW INTENSITY or HIGH INTENSITY, and how much of each specifically for you.

EPIGENETIC RECOMMENDATIONS

YOUR INTENSITY RANGES



LOW INTENSITY = 50%-65% of your max heart rate (MHR)



HIGH INTENSITY = 70%-85% of your max heart rate (MHR)

In the illustrations above you will find your target heart rate for both LOW INTENSITY and HIGH INTENSITY exercise, the duration at which these exercises are performed and optimal weekly frequency.

TYPICALLY LOW INTENSITY			LOW OR HIGH INTENSITY			TYPICALLY HIGH INTENSITY		
WALKING YOGA	HIKING PILATES	JOGGING	BIKING SWIMMING	WEIGHT LIFTING CALISTHENICS	ROWING	CROSSFIT JUMP ROPE	HIIT STEP CLASS	SPRINTS

Exercise activities can be classified by which heart rate zone they will typically put you in. The above illustration is a reference for sample exercise activities in either **LOW INTENSITY** or **HIGH INTENSITY** ranges. The middle are the activities that could be either, depending on how they are performed.

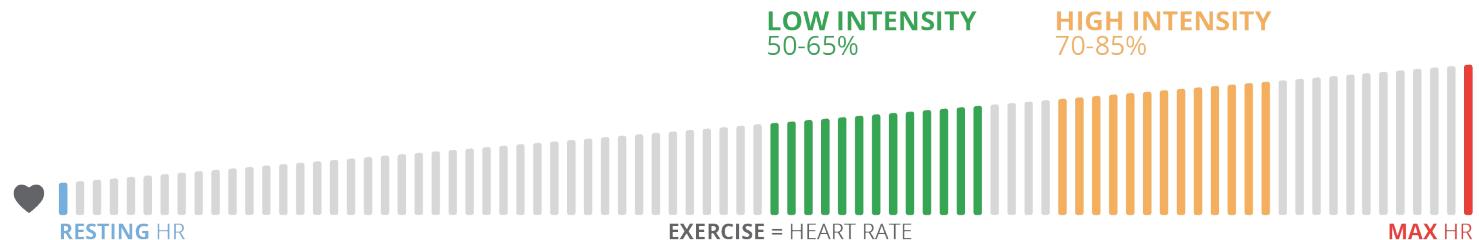


DO



OPTIMAL EXERCISE

IMPLEMENTATION



Exercise is calculated based on the heart rate target you need to reach in order to facilitate the proper utilization of energy during exercise. Heart rate is relative to each individual and varies greatly depending on your weight, age and endurance level. The type of exercise is not as important as the length of your activity and how it effects your heart rate during the exercise.

An exercise could be LOW or HIGH INTENSITY depending on how the exercise is performed and is influenced by your current cardiovascular health. Referencing the samples used previously, jogging will likely place your heart rate in the LOW INTENSITY zone whereas sprinting will place it in the HIGH INTENSITY. Both exercises are performed in a similar fashion, just at different paces. This is how many exercises could be one or the other and why heart rate monitoring is important.

HEART RATE MONITORING

Using a heart rate monitor is the most convenient method of tracking your heart rate as you exercise and many monitors will log your heart rate over time. To check your pulse manually, place two fingers on your wrist between the bone and the tendon on the thumb side of your wrist. When you feel your pulse, count the number of beats in 15 seconds. Multiply this number by 4.

Over time, you will become familiar with how your body feels within each zone, so monitoring won't always have to be done. However, as your cardiovascular health improves, exercises will likely need to increase in effort to maintain proper intensity zones. For this, it is recommended to periodically check your heart rate to assure you are meeting your requirements.

STRENGTH TRAINING

Strength training is an important component of physical health and should be performed 2-3 times per week. Improving or maintaining strength does not require weights or a gym, body weight exercises can be just as beneficial. Strength training can be both **LOW INTENSITY** or **HIGH INTENSITY** depending on how quickly repetitions are performed, the amount of repetitions in a set, the sets per exercise and the rest between sets. Seek a professional trainer if you need help on how to perform these effectively and safely.

When using weights, you want to use weights that are heavy enough to challenge you at the end of each of 2 to 3 sets of 8 to 15 reps. If by the end of each set of repetitions, you feel like you could keep performing the exercise, the weight you are using is too light to provide a sufficient muscle-strengthening stimulus. As you near the end of the exercise, you should feel like the last 2 to 3 reps are difficult to complete while maintaining good form.

SAFETY REMINDERS

Always properly warm-up before exercise and cool-down afterwards for safe heart rate changes. Warm-up examples are walking, jumping jacks, planks and can prevent injury. Cool-down examples include walking or stretching and can improve range of motion.

Training in purely Low or High intensity without a balance between the two can often have a negative impact, make sure you give yourself some variation and follow recommendations. If it has been more than a year since you last exercised, begin with low intensity exercises for a few weeks to allow your body to acclimate safely.



DO



OPTIMAL EXERCISE

WORKOUT WORKSHEET

LOW INTENSITY

YOGA
PILATES
WEIGHT TRAINING
CYCLING
SWIMMING
SOCCER

MARATHON
CROSS COUNTRY
JOGGING
POWER WALKING
WATER AEROBICS
HIKING

HIGH INTENSITY

SPIN CLASS
STEP CLASS
CROSS FIT
SPRINTS
TABATA
JUMP ROPE

BOXING
INTERVAL TRAINING
BARRE
ZUMBA
KICK BOXING
STAIR CLIMBING

Choose either the **WEIGHT MAINTENANCE** or **WEIGHT LOSS** calendar below, then fill in the **LOW** and **HIGH** from the sample LI and HI categories above or choose your own **LOW** and **HIGH** activities. Once you have finished, you will have a monthly workout schedule tailored to your preferences. Reprint this sheet as often as you would like to make changes to your schedule.

WEIGHT MAINTENANCE

2-3 PER WEEK **60 LOW / 40 HIGH**

SUN	MON	TUE	WED	THU	FRI	SAT
		LOW		HIGH		
	LOW		HIGH		LOW	
		HIGH		LOW		
	HIGH		LOW		LOW	

WEIGHT LOSS

3-4 PER WEEK **60 LOW / 40 HIGH**

SUN	MON	TUE	WED	THU	FRI	SAT
HIGH		LOW		LOW		HIGH
	LOW		HIGH		LOW	
HIGH		LOW		HIGH		LOW
	LOW		LOW		HIGH	

Your nutritional habits are arguably the most influential element for optimal body composition and performance but this area is often the most challenging to get right. Your genes determine your ideal breakdown of proteins, carbohydrates and fats, which are known collectively as macronutrients. You have a genetic disposition to be more or less sensitive to fats and/or carbohydrates. Those sensitivities dictate your ideal macronutrient footprint.

It can be cumbersome and time-consuming to count calories and then divide those calories based on your macronutrient percentages. We strongly believe you don't have to count and calculate calories to successfully manage and optimize your body composition and health.

CARB SENSITIVITY

LOW

20% Males
20% Females

MEDIUM

69% Males
66% Females

HIGH

11% Males
14% Females

Reduce white flours and sugars and increase vegetables and fruits.

FAT SENSITIVITY

LOW

36% Males
30% Females

MEDIUM

22% Males
24% Females

HIGH

42% Males
46% Females

Typically your body has challenges with weight loss, due to your homozygous proline variant. However, they can be overcome by your genotype's preferred program.

EPIGENETIC RECOMMENDATIONS

MACRONUTRIENT PROPORTIONS

30% FAT

35% PROTEIN

35% CARBOHYDRATE

We have formulated macro-nutrient proportions based on your fat and carbohydrate sensitivities and provided an exact percentage of each as seen above. If you tend to be on the highly disciplined end of the scale, there are plenty of applications out there that will allow you input your own macro-nutrient percentages and track your calorie proportions.

We have discovered that most people don't want to or will not count calories, let alone macronutrients and certainly not relative proportions. We believe for most people, the "Hand Serving" method we have chosen to implement is nearly as effective, and requires only your body parts, which we will explain on the subsequent page.

IMPLEMENTATION

HAND SERVING METHOD

Most people have told us they want a easier method to utilize proper portion control using their results and the reason we have opted to implement this easy to use the hand serving method. Your hand is proportionate to your body and is easily accesible, making it an ideal tool for measuring macronutrients.

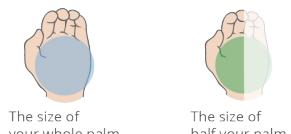
MEASURING MACRONUTRIENT SERVINGS

Servings will differ depending on your results, however everyone will use to parts of the hand for measuring your macronutrients; the thumb for fats and the palm of the hand for proteins and carbohydrates.

FATS



PROTEINS & CARBOHYDRATES

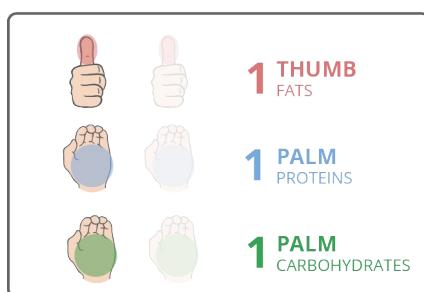


Your personalized recommendations may have full or half use of the thumb or palm for measuring your servings. Once you understand your measurements per serving, you need to determine how many servings you need per day to meet your goals. In the results we have provided recommendations based on averages for both men and women to lose, maintain, or gain weight. People eat in varying frequencies and patterns, so it is your choice on how to combine the servings into meals or snacks. Some may have three servings per meal in fewer meals in a day, or two servings per meal in more meals in a day.

YOUR RESULTS

We have converted your proportions into a single hand serving of FATS, PROTEINS and CARBOHYDRATES below.

YOUR SERVING SIZE



ROUGHLY 290 CALORIES

This is your calculated single serving from your proportions.

YOUR SERVINGS PER DAY

LOSE WEIGHT	MAINTAIN WEIGHT	GAIN WEIGHT
4	6	7
5		8

ROUGHLY 1750 CALORIE DIET TO MAINTAIN FOR WOMEN

Here are the amount of hand servings you should choose to meet your goal.

INCREASE SERVINGS IF

- You are larger in stature
- Do more than recommended in DO
- Are trying to gain muscle

DECREASE SERVINGS IF

- You are smaller in stature
- Do less than recommended in DO
- Are not noticing weight loss

Once you have chosen the amount of servings you need to reach your goals, you need to determine how you need to split the servings into **MEALS** and/or **SNACKS**. This only requires simple division and something we can not provide as we do not know how many meals and snacks you prefer. Follow the formula below.

$$\frac{\text{SERVINGS PER DAY}}{\text{NUMBER OF MEALS YOU WANT}} = \text{NUMBER OF SERVINGS PER MEAL}$$

IMPLEMENTATION CONTINUED

MACRONUTRIENTS

Macronutrients are proteins, carbohydrates and fats which form the basis of any diet and perform essential functions in fueling the body. They are called macronutrients because they are needed in large quantities, as opposed to micronutrients such as vitamins and minerals which are necessary only in minute amounts. Macronutrients are vital for the body to grow, repair and develop new tissue and regulate life processes. What we provide, is the proportions of macro-nutrients that best optimize your body's processes from your genetics.

PROTEINS

Proteins build, maintain and replace tissue in the body. They are the primary component in muscles, organs and the immune system. In the body, proteins are broken down into basic units called amino acids, of which there are 22 types that are essential to human health. The body can make 13 of them on its own, but the other nine, called the essential amino acids, must be consumed. Animal-based proteins are "complete", meaning they contain all nine essential amino acids, while most vegetable proteins do not contain all nine amino acids. Those following vegetarian or vegan diets must consistently eat a variety of vegetable proteins to consume all of the essential amino acids.

Smart Protein Choices:

Lean meats, fish, poultry, low fat cheese, milk, yogurt, eggs, legumes, soy, nuts and seeds.

CARBOHYDRATES

Carbohydrates are the main source of energy for the body and are found at some level in almost all foods. The two main types of carbohydrates are simple and complex. The type is determined by the length of the carbohydrate molecules. Simple carbohydrates, or sugars, have shorter molecule chains and are easy for the body to break down rapidly, delivering quick energy. Complex carbohydrates, or starches, have longer molecule chains, take more time to be processed by the body and provide energy over a longer period of time. The most beneficial carbohydrates are minimally processed and high in fiber.

Smart Protein Choices:

Simple: fresh fruit.

Complex: vegetables, oatmeal, whole-grain bread, sweet potatoes and brown rice.

FATS

While carbohydrates are the main source of energy for the body, fats are the backup energy source when carbohydrates are not available. Fats assist in the absorption of certain nutrients and maintain core body temperature. Fats are highly concentrated forms of energy which are high in calories so quantities should be limited. Heart-healthy monounsaturated and polyunsaturated fats, found in vegetable oils, nuts, avocados and some fish should be consumed more frequently than the saturated and trans fats found in meat, seafood, dairy and many processed foods.

Smart Fat Choices:

Omega-3's can be found in fatty fish like salmon, mackerel, sardines; nuts and seeds.

Omega-6's from pretty much all kinds of vegetable oil like olive, coconut, canola; avocado.

Below is your customized weekly meal plan based on your recommended macronutrient proportions from your results. This is a **1500** calorie diet.

	 BREAKFAST	 LUNCH	 SNACK	 DINNER
SUN	Scramble egg whites & cheese with spinach 1 cup Fresh blueberries 0.5 cup Fresh spinach 4 fluid ounce(s) Skim milk 1 slice Sprouted wheat, whole grain bread 1 cup Strawberries 3 tea spoon Trans fat-free buttery spread 1 ounce(s) 2% milkfat Cheddar cheese 2 large Egg white	Toss ingredients with spinach, oil and vinegar 1 cup Chopped tomato 0.125 cup Kidney beans, cooked or canned 0.5 cup Fresh mushrooms 1 table spoon Balsamic Vinegar 1 ounce(s) Canned artichoke 3 cup Fresh spinach 4 ounce(s) Water packed white tuna 0.5 1 cup Quinoa, cooked 0.75 table spoon Olive oil	Mix blueberries & nuts with yogurt 0.5 cup Fresh blueberries 4 ounce(s) Greek yogurt, plain, non fat 1 table spoon Chopped walnuts	Stir fry chicken & vegetables. Over spaghetti squash 8 ounce(s) Boneless chicken breast 0.5 cup Fresh mushrooms 1.25 table spoon Olive oil 0.75 cup Broccoli 0.66 cup Spaghetti squash, cooked 3 table spoon Chopped onion
MON	Blend all ingredients until smooth 0.5 cup Fresh spinach 1 cup Greek kefir, plain 0.5 cup Silk Plain Soy Milk 1.25 cup Fresh raspberries 0.5 each Small banana	Top quinoa w/lentils/veg/chicken/avocado/salsa 0.5 cup Cooked lentils 0.33 1 cup Quinoa, cooked 5 ounce(s) Chicken Breast / White Meat 0.33 cup Sliced avocado 0.25 cup Salsa 0.33 CUD Chopped tomato	Combine tuna & mayo. Spread on rice cake 0.33 cup Tuna Solid White in water 1 table spoon Mayonnaise - low fat 1 each Tomato slice 1 each Brown rice cake	Season/broil/grill salmon.. Rice & broccoli side 0.5 cup Broccoli 7 ounce(s) Salmon 0.25 CUD Brown rice, cooked
TUE	Top bread w/ peanut butter.W/soy milk/grapefruit 2 slice Sprouted wheat, whole grain bread 0.5 each Grapefruit 1 table spoon Peanut Butter 1 CUD Silk Plain Soy Milk	Toss all ingredients together 1 cup Roasted beets 0.5 table spoon Italian dressing, reduced fat 4 ounce(s) Turkey breast 0.25 1 cup Chickpeas (garbanzo beans, bengal gram), mature seeds, canned 0.33 tea spoon Olive oil 0.5 cup Grated carrots 1 1 oz cooked, yield Turkey bacon, cooked 1 table spoon White vinegar 2 cup Fresh spinach 1.5 table spoon Sunflower seeds	Blend soy milk & strawberries with one ice cube 1 cup Silk Plain Soy Milk 1 CUD Strawberries	Season pork, roast at 325F. Serve w/squash & veg 1.5 cup Green beans, steamed or boiled 0.125 tea spoon Ground dried sage 1 cup Spaghetti squash, cooked 10 ounce(s) Pork, loin, lean, uncooked 0.5 tea spoon Dried rosemary 1 cup Cauliflower
WED	Top waffle w/cottage cheese w/apple.berries, nuts 1 each Whole grain waffle 0.75 cup Cottage Cheese -1% fat 1 each Apple 0.125 tea spoon Cinnamon 1.25 table spoon Chopped walnuts 0.5 CUD Fresh blueberries	Toss all ingredients together in a bowl 0.125 cup Grated carrots 0.33 cup Whole wheat pasta, cooked 6 ounce(s) Salmon - broiled 1 cup Fresh spinach 2 each Tomato slice 1 table spoon White vinegar 1 table spoon Italian dressing, reduced fat	Turkey wrap 2 ounce(s) Turkey breast 1 tea spoon Mustard 2 each Lettuce leaf 1 each 100% whole wheat wrap, 6"	Season tilapia as desired; roast. cook veg in oil 0.75 cup White mushrooms, sliced 4 cup Fresh spinach 0.66 1 cup Quinoa, cooked 2 tea spoon Trans fat-free buttery spread 1 cup Summer squash, cooked 3 table spoon Chopped onion 0.75 table spoon Olive oil 6 ounce(s) Tilapia
THU	Cook egg & bacon in spread, place on muffin, fruit 2 large Egg white 3 tea spoon Trans fat-free buttery spread 1 ounce(s) Canadian bacon, extra lean 1 1 muffin English muffins, wheat 1 cup Fresh cantaloupe 1.5 table spoon Raisins 1 CUD Strawberries	Wraps w/o/v arugula, turkey & cheese. Veg slices 1.5 tea spoon Olive oil 1 cup Mixed vegetables (non starchy) 1 1 tablespoon Vinegar, red wine 3 ounce(s) Turkey breast 2 each 100% whole wheat wrap, 6" 1.5 ounce(s) 2% milkfat Cheddar cheese 2 cup Arugula 0.33 cup Chopped tomato	Top cottage cheese with raspberries 0.66 cup Cottage Cheese -1% fat 0.75 CUP Fresh raspberries	Season chicken, drizzle w/oil. 400F 20min 6 ounce(s) Boneless chicken breast 0.25 cup Brown rice, cooked 0.25 table spoon Garlic powder 0.5 cup Green beans, steamed or boiled 0.125 tea spoon Ground black pepper 1.75 table spoon Olive oil 0.25 tea spoon Paprika
FRI	Cook oats w/milk per directions.Top straw/walnuts 0.66 cup Strawberries 10 fluid ounce(s) Skim milk 2.25 table spoon Chopped walnuts 0.5 CUD Drv steel cut oats	Toss all ingredients together 0.5 each Tomato 1 table spoon Chopped walnuts 0.125 1 cup Chickpeas (garbanzo beans, bengal gram), mature seeds, canned 0.125 cup Chopped red onion 3 cup Mixed greens 1 table spoon Olive oil 0.5 cup Grated carrots 5 ounce(s) Water packed white tuna 2 1 tablespoon Vinegar, red wine	Top yogurt with thawed cherries & almonds 1 table spoon Slivered almonds 0.25 cup Unsweetened frozen cherries 6 ounce(s) Greek voaurt. plain, non fat	Top chick w/ seasoning/tomato; roast 350F 20min 0.25 table spoon Olive oil 0.25 tea spoon Italian seasoning medley 1 cup Chopped tomato 7 ounce(s) Boneless chicken breast 0.75 cup Whole wheat spaghetti, cooked 2 table spoon Grated parmesan cheese 0.75 CUD Broccoli
SAT	Scramble egg whites. Top muffin w/egg/bacon 0.75 cup Fresh cantaloupe 0.33 cup Strawberries 1 each Whole wheat English muffin 3 large Egg white 1 cup Milk - skim, no fat 2 ounce(s) Canadian bacon, extra lean	Grilled turkey/cheese/arugula/avocado sandwich 1 cup Arugula 1 ounce(s) 2% milkfat Cheddar cheese 2.25 tea spoon Olive oil 0.125 cup Sliced avocado 2 slice Sprouted wheat, whole grain bread 1 each Tomato slice 3 ounce(s) Turkey breast	Almond butter wrap 0.5 table spoon Almond Butter 1 each Whole wheat wrap	Season meat, sautew/onion. Over quinoa. Green/dres 2.75 tea spoon Olive oil 0.5 1 cup Quinoa, cooked 1 table spoon Chopped onion 0.25 cup Chopped tomato 1 table spoon Italian dressing, reduced fat 6.5 ounce(s) Lean ground beef 3 cup Mixed greens

Below is your customized weekly meal plan based on your recommended macronutrient proportions from your results. This is a **1800** calorie diet.

	 BREAKFAST	 LUNCH	 SNACK	 DINNER
SUN	Wrap scrambled egg + white & cheese w/spinach. 1 each Egg whole w/ yolk 1 cup Fresh blueberries 0.5 cup Fresh spinach 8 fluid ounce(s) Skim milk 1.25 cup Strawberries 2 tea spoon Trans fat-free buttery spread 1 each 100% whole wheat wrap, 6" 1 large Egg white	Toss ingredients with spinach, oil and vinegar. 3 cup Fresh spinach 1 cup Chopped tomato 1 each Cooked egg white 0.33 cup Kidney beans, cooked or canned 0.75 table spoon Olive oil 1 table spoon Balsamic Vinegar 0.25 cup Fresh mushrooms 4 ounce(s) Water packed white tuna 1 ounce(s) Canned artichoke 0.66 1 CUP Quinoa, cooked	Mix blueberries & nuts with yogurt. 1 table spoon Chopped walnuts 8 ounce(s) Greek yogurt, plain, non fat 0.5 CUD Fresh blueberries	Stir fry chicken & vegetables. Over spaghetti squash. 10 ounce(s) Boneless chicken breast 0.75 cup Broccoli 1.5 table spoon Olive oil 3 table spoon Chopped onion 0.66 cup Spaghetti squash, cooked 0.5 cup Fresh mushrooms
MON	Blend all ingredients until smooth. 1 cup Fresh raspberries 0.5 each Small banana 0.5 cup Silk Plain Soy Milk 1 cup Fresh spinach 12 each Almonds, unsalted 1 CUD Greek kefir, plain	Top quinoa w/lentils/veg/chicken/avocado/salsa. 0.51 cup Quinoa, cooked 0.5 cup Chopped tomato 0.5 cup Cooked lentils 7 ounce(s) Chicken Breast / White Meat 0.33 cup Sliced avocado 0.25 CUD Salsa	Combine tuna & mayo. Spread on rice cakes. 1 each Tomato slice 2 each Brown rice cake 0.33 cup Tuna Solid White in water 1 table spoon Mayonnaise - low fat	Season/broil/grill salmon.. Rice & broccoli side. 0.5 cup Broccoli 8 ounce(s) Salmon 0.5 CUD Brown rice, cooked
TUE	Top bread w/peanut butter.W/ soy milk/grapefruit. 2 slice Sprouted wheat, whole grain bread 0.5 each Grapefruit 1 cup Silk Plain Soy Milk 1.5 table spoon Peanut Butter	Toss all ingredients together. 0.5 cup Kidney beans, cooked or canned 1 1 oz cooked,yield Turkey bacon, cooked 2 cup Fresh spinach 0.5 cup Grated carrots 1 cup Roasted beets 0.5 table spoon Italian dressing, reduced fat 0.5 each Bell pepper 5 ounce(s) Turkey breast 1 table spoon White vinegar 1 table spoon Sunflower seeds 1 large Egg white	Blend soy milk & berries with one ice cube. 1 cup Strawberries 0.5 cup Frozen unsweetened blueberries 1 CUD Silk Plain Soy Milk	Season pork, roast at 325F. Serve w/squash & veg. 0.125 tea spoon Ground dried sage 1 cup Spaghetti squash, cooked 1 tea spoon Olive oil 1 cup Cauliflower 1.66 cup Green beans, steamed or boiled 0.5 tea spoon Dried rosemary 12 ounce(s) Pork. Loin, lean, uncooked
WED	Top waffle w/ cottage cheese, apple, berries, nuts 1.5 table spoon Chopped walnuts 1 each Apple 1 each Whole grain waffle 0.125 tea spoon Cinnamon 1 cup Fresh blueberries 0.75 cup Cottage Cheese -1% fat	Toss all ingredients together in a bowl. 0.125 cup Grated carrots 1 table spoon Italian dressing, reduced fat 7 ounce(s) Salmon - broiled 1 table spoon White vinegar 0.66 cup Whole wheat pasta, cooked 0.33 cup Chopped tomato 1 cup Fresh spinach	Turkey Swiss wrap. 0.5 ounce(s) Low fat Swiss cheese 2 each Lettuce leaf 2 ounce(s) Turkey breast 1 tea spoon Mustard 1 each 100% whole wheat wrap. 6"	Season tilapia as desired;roast. cook veg in oil. 2 tea spoon Trans fat-free buttery spread 1 table spoon Olive oil 0.75 cup White mushrooms, sliced 7 ounce(s) Tilapia 0.75 1 cup Quinoa, cooked 1 cup Summer squash, cooked 3 table spoon Chopped onion 4 CUP Fresh spinach
THU	Cook egg and bacon in spread, place on toast. 1.5 cup Fresh cantaloupe 2 slice Sprouted wheat, whole grain bread 1 cup Strawberries 1 ounce(s) Canadian bacon, extra lean 1.25 table spoon Raisins 2 large Egg white 3 tea spoon Trans fat-free buttery spread	Wraps w/ o/v arugula, turkey & cheese, veg slices. 2 tea spoon Olive oil 0.5 cup Chopped tomato 1 cup Mixed vegetables (non starchy) 10 each Baby carrots 2 cup Arugula 1.5 ounce(s) 2% milkfat Cheddar cheese 2 each 100% whole wheat wrap, 6" 1 1 tablespoon Vinegar, red wine 4 ounce(s) Turkey breast	Top cottage cheese with raspberries & nuts. 0.75 cup Fresh raspberries 0.33 1 oz Nuts, cashew nuts, raw 0.66 CUD Cottage Cheese -1% fat	Season chicken, drizzle w/oil. 400F 20min. 0.25 table spoon Garlic powder 0.25 tea spoon Paprika 1.75 table spoon Olive oil 0.66 cup Green beans, steamed or boiled 0.33 cup Brown rice, cooked 0.125 tea spoon Ground black pepper 8 ounce(s) Boneless chicken breast
FRI	Cook oats w/milk.Top straw/walnuts. W/bacon. 10 fluid ounce(s) Skim milk 0.5 cup Dry steel cut oats 1 ounce(s) Turkey bacon 2 table spoon Chopped walnuts 0.66 CUD Strawberries	Toss all ingredients together. 0.66 1 cup Chickpeas (garbanzo beans, bengal gram), mature seeds, canned 1 each Brown rice cake 0.5 table spoon Olive oil 1 table spoon Chopped walnuts 2 1 tablespoon Vinegar, red wine 0.5 each Tomato 0.66 cup Grated carrots 4 ounce(s) Water packed white tuna 3 cup Mixed greens 0.125 cup Chopped red onion	Top yogurt with thawed cherries & almonds. 8 ounce(s) Greek yogurt, plain, non fat 0.33 cup Unsweetened frozen cherries 1.5 table spoon Slivered almonds	Stir fry beef w/veg. Over quinoa. 2 cup Fresh spinach 0.5 1 cup Quinoa, cooked 1 table spoon Italian dressing, reduced fat 1 table spoon Chopped onion 0.25 cup Chopped tomato 12 ounce(s) Lean ground beef
SAT	Scramble egg whites. Top muffin w/egg/bacon. 1 cup Fresh raspberries 3 large Egg white 1 ounce(s) Canadian bacon, extra lean 1 each Whole wheat English muffin 1 cup Milk - skim, no fat 1 each Grapefruit	Grilled turkey/cheese/arugula/avocado sandwich. 2 slice Wheat bread 2 ounce(s) 2% milkfat Cheddar cheese 1 cup Arugula 3 tea spoon Olive oil 0.125 cup Sliced avocado 1 each Tomato slice 4 ounce(s) Turkey breast	Almond butter banana wrap. 1 each Whole wheat wrap 0.66 table spoon Almond Butter 0.33 each Small banana	Season & top chicken w/chopped tomato. Roast 350F. 1.5 table spoon Olive oil 0.33 cup Whole wheat spaghetti, cooked 8 ounce(s) Boneless chicken breast 0.5 cup Broccoli 1 cup Chopped tomato 2 table spoon Grated parmesan cheese 0.25 tea spoon Italian seasoning medley



Your genetically preferred supplement program is designed to support the body based on your variations on each of the genes tested. Some supplements stimulate specific genes, while various genetic variants are better left unstimulated. The following supplement recommendations are optimal choices for your basic genetic support. Additional supplements suggested will refine your performance and health and supply your body with the proper nutrients needed to reach optimal health and function. Recommended supplements may be used in conjunction with an existing supplement program based on knowledge of your medical history or known vitamin/mineral deficiencies.

OPTIMAL HEALTH

BCAAs Leucine, isoleucine and valine provide nutritional support for individuals seeking optimal lean muscle mass. BCAAs will "trick" your body into thinking it has been replenished in proteins and begins using free fatty acids for energy, post workout. *Avoid consuming anything with carbohydrates for 90 minutes, post exercise (liquid or solid foods) as it will immediately stop fats being used for energy* (Take BCAAs if your initial goal is to lose weight. Once you have reached your desired weight it is not necessary to continue supplementing with BCAA's.)

Crave Control It is important to balance the neurotransmitters that play distinctive roles in many types of cravings. Tyrosine and 5-HTP stimulate the natural production of dopamine and serotonin to elevate mood and decrease distinctive food cravings. Rhodiola helps to calm stress response which can have a natural soothing effect post exercise. Chromium promotes healthy action of insulin in the body and supports healthy insulin/blood sugar levels.

L-Carnitine L-Carnitine is essential for fat metabolism and energy production. Acetyl-L-Carnitine is the acetyl ester of L-Carnitine that uniquely supports brain function.

Omegas A blend of omega-3 and omega-6 fatty acids may be necessary due to the decrease of fats from your diet. Essential fatty acids (EFAs) aid in human metabolism and are necessary for proper function of the body's systems, including the skeletal and cardiovascular systems, with added benefits to brain function. They are not produced by the body so we must get EFAs from our diet.

Vitamin B complex TMG and choline are included to support methylation. B vitamins also keep the nervous system in tune, enhance energy and aid in stress-relief. They are great for the eyes, skin and hair.



ADRB2-16

Individuals vary in the degrees to which they utilize or store carbohydrates and fat for energy. ADRB2 encodes for receptors expressed primarily in fat cells and is involved in the mobilization of fat for energy. Polymorphisms on ADRB2 alter the number and/or activity of the receptors on the cell surface, which determines how well those receptors function to mobilize or store fat for energy. Because these receptors are regulated through the nervous system, they are influenced by duration and intensity of exercise. Position 16 on this gene dictates the best type of exercise(s) for an individual. Polymorphisms at loci 16 identify phenotype patterns and are gender specific.

Arg16Gly



Women with this polymorphism tend to carry little weight in their abdominal region. Rather, fat accumulates in other areas such as the thighs or hips. Your genotype's preferred exercise includes a mix of steady aerobic and high intensity. Your receptors require both forms of stimulation for optimal results.

ADRB2-27

As stated previously, ADRB2 is expressed primarily in fat cells and is also involved with the storage of carbohydrates as fat. Loci 16 is involved with fat metabolism whereas loci 27 deals primarily with carbohydrates and glucose homeostasis. Glutamic acid at loci 27 increases the body's tendency to convert excess carbohydrates into fat. While this may have been an effective adaptation when famines were common, today this genotype is associated with an increased risk of obesity, especially in the presence of a high carbohydrate and high caloric diet.

Gln27Glu



With glutamic acid present at loci 27, your body is moderately resistant to weight loss and you have a higher risk of obesity when your diet is high in carbohydrates. It also indicates that your body has altered glucose metabolism with the tendency to convert extra carbohydrates into fat, giving your body extra fat to breakdown.

PPARG-12

Peroxisome Proliferator Receptor Gamma is a nuclear receptor that can have a dominating role over the metabolic processes controlled by the nervous system. PPARG regulates how the body metabolizes fat and carbohydrates and how fat is stored in the body. It activates genes that stimulate fat uptake and is also associated with a high degree of sensitivity to glucose, insulin and resistance to weight loss. Clinical research has shown any polymorphism with proline at loci 12 dictates a resistance to weight loss and a sensitivity to fat being directly associated with overall body mass. It is necessary to analyze this gene due to the influence it can have over the 4 other genes in the Fit by Design weight management and metabolism analysis. This gene likely developed its strength because of its capacity to store fat and carbohydrates, which enhanced survival when food was hard to find. It is through the idea of survival of the fittest that the "normal" polymorphism is the most problematic.

Pro12Pro



Proline is the problematic amino acid in this gene and since you have proline in both positions your genotype shows resistance to weight loss if you are sedentary and if you eat an unhealthy diet of saturated fats and simple carbohydrates. Conversely, because there is a strong correlation to a healthy diet and exercise program for your genotype, eating well and exercising for your genotype can promote the proper response of the PPARG receptors. In short, eating and exercising for your genotype enables you to overcome the weakness of this polymorphism.

ADRB3-64

Like ADRB2, beta-3 adrenergic receptor is regulated through the nervous system. Whereas FABP2 determines how much fat a person absorbs from the diet, ADRB3 determines how much fat is broken down during exercise. Beta-3 adrenergic receptor is expressed in adipose (fat) tissue and proper receptor stimulation promotes the breakdown of fat. Overall energy expenditure, including exercise, stimulates these receptors. Arginine is the problematic amino acid on ADRB3. When arginine is present, the receptors are not as readily stimulated and there is a higher risk of weight gain and obesity if you are sedentary.

Trp64Trp



Because this gene is involved with energy expenditure and you have no arginine present, if you maintain a good exercise regime there is no known risk of obesity. Through exercise, you will not only be able to achieve goals in weight loss, you will also be burning more fat during your time spent exercising.