



Wellness:

The Importance of Understanding
Your Baseline and Periodic Monitoring

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Contents

Wellness: The Importance of Understanding Your Baseline and Periodic Monitoring 1

 Where Should You Start? 3

 What Difference does it Make Anyway? 6

 Body Image: A Powerful Motivator 8

 Willpower: Practice Makes Perfect (At Least Much Better) 9

 What Is the Best Plan For You? 10

 How to Maintain Your Pace 11

 You’ve Reached Your Goal, Now What? 13

References 15

Losing weight and quitting smoking are Americans' top New Year's Resolutions. Both are good for your health and can improve your looks, and setting positive goals to launch a new year is commendable, but how many of us make these resolutions only to drop them after January 4th? Thinking carefully about what you hope to achieve with your resolution is important for a solid start. Your body is unique, your goals are unique, and each individual has a very specific set of circumstances. For example, someone who has diabetes and is trying to lose weight will need to approach their goal more carefully than someone who doesn't have diabetes. Someone who has been smoking a pack of cigarettes a day for 50 years may need a stronger support system for their effort to quit than someone who has only smoked a couple of cigarettes a day for a year or two. Putting some serious thought and planning into how to achieve your health goals is much more effective than telling yourself at midnight on December 31st that this is your last of anything!

Where Should You Start?

We've all heard the advice, "Consult your doctor before beginning any exercise program, diet, etc..."

The disclaimer before you change your lifestyle is there for a very important reason. Although everyone thinks they are immune to a stroke or heart attack, sometimes they do happen and a sudden change in your activity level or diet can bring one on if it's an extreme change. Hospitals report an increase in deaths due to cardiac events during the winter holidays. There are likely several reasons for this, including drunk driving and delaying medical care, but one important factor may be the sudden influx of greasy, heavy food or other changes in diet. One study¹ concluded that during the years 1998-2001 the death rates from December 25th through January 7th were 4.4% higher than would normally be expected at that time of year. The point is that before you drastically reduce your calories or go out to run for a mile when you haven't been exercising can be dangerous without knowing what kind of shape your body is in and planning your health changes carefully.

The benefit of establishing a health baseline, either with your doctor or at an independent testing laboratory, before making changes is important for many reasons. Knowing where you are in terms of health can prevent you from making extreme changes that are dangerous for starters. If you have high blood pressure, but didn't know about it, or are prediabetic but didn't recognize the signs or symptoms you could be in for a nasty surprise when you make a sudden change and go for a 2 mile run or go on an extreme diet. Once you have this information in hand you will be in a better position to make good decisions about how to start making changes.

Secondly, and critical for managing your goals in the long term, is that you know what type of changes you should be making on the inside. Let's assume that you own a scale and have stepped on it so that you know how much weight you want to lose and have done some research into what your ideal weight is. Information about your Body Mass Index (BMI) and an ideal weight for someone your age, height and gender is readily available from your doctor or online. Getting to an ideal weight will help you look better on the outside and on the inside. If you're overweight or obese you may already have high cholesterol, metabolic syndrome (prediabetes) or high blood pressure. Even if you aren't aware that you have any of these health problems they can affect how you feel whether you notice it or not.

Losing weight and exercising will affect your blood pressure, cholesterol and blood glucose level so that you not only look better but feel better. These symptoms of cardiovascular disease or diabetes may need to be controlled with medications but the amount of medication you need could be significantly reduced by changing your lifestyle and making healthier choices. You won't know how much progress you've made and whether you can reduce or even stop taking medication unless you are tracking your changes with frequent laboratory tests and monitoring.

There are some specific tests that² can indicate the status of your overall health and are a good idea to get periodically as you monitor your progress toward your health, weight and fitness goals.

Basic Check–Up: Tests in a basic check-up might include:

- A Complete Blood Count (CBC) which tests for blood disorders such as leukemia, anemia, and blood clotting.
- A chemistry panel which includes multiple tests that provide information on glucose levels, electrolytes, and kidney and liver function.
- A lipid panel to measure cholesterol, HDL, LDL and triglycerides which can identify possible risks for coronary artery disease or stroke.
- A Thyroid Stimulating Hormone (TSH) test to monitor thyroid function and can identify the presence of hyper- or hypothyroidism.
- A urinalysis that looks for substances in the urine that could indicate metabolic or kidney problems.
- A blood pressure check.

These basic tests are generally administered during an annual physical in a doctor's office, or can be obtained at an independent testing laboratory, and provide valuable information on normal bodily functions. Results from these tests can be used to determine whether more in-depth or further testing is needed in specific areas.

PSA (Prostate Specific Antigen) Test: PSA is produced by the prostate gland in men and is recognized as an indicator of prostate health. Regardless of age, getting an initial test to establish a baseline against which periodic tests are measured over time has been shown to be a valuable preventive measure for men.

Thyroid Panel: The thyroid gland regulates the body's use of energy and abnormal levels of Thyroid Stimulating Hormone (TSH), T3 or T4 can cause an array of symptoms including fatigue, weight

fluctuations or hair loss. A thyroid imbalance can make people susceptible to additional health problems such as osteoporosis, heart disease and infertility.

Glucose (Serum) Test: Abnormally high levels of sugar in the blood may indicate metabolic syndrome (pre-diabetes) or diabetes. Comparing later glucose levels can identify early signs of diabetes. Preventive treatment and lifestyle changes can dramatically delay the onset of diabetes.

C-Reactive Protein: The amount of this protein increases in the body when inflammation is present. High levels of CRP (C-Reactive Protein) can indicate cardiovascular disease, inflammatory bowel disease, some forms of arthritis, or pelvic inflammatory disease, among others.

VAP Test: The VAP or Vertical Auto Profile test takes a deeper dive than a standard lipid panel by measuring the density of the lipid particles directly and looking at the level of Lp(a) which is correlated with a higher risk of cardiovascular disease. Smaller, denser particles indicate higher risk than can be identified by HDL, LDL and total cholesterol numbers.

PLAC Test: The PLAC test measures Lp-PLA2, a vascular specific inflammatory enzyme that is associated with a very high risk of stroke. This enzyme indicates the presence of rupture-prone plaque that can cause strokes. This is the only test that can identify stroke risk specifically, as opposed to general cardiovascular risk.

What Difference does it Make Anyway?

Why should anyone care about a little bit of extra weight or the fact that they need to take medication every day? The spare tire or daily meds may not seem to be a big problem now and in your daily life, they may not be. Although no one wants to have a heart attack or any sudden cardiac event this isn't always a strong enough motivator to change your habits and give up the French fries and couch potato lifestyle. The darker side of not taking care of our bodies is that they may betray us in unexpected and

unpleasant ways. A heart attack is sudden, painful and requires serious recovery time. A stroke can be even more devastating over time.

Strokes and the resulting paralysis and disability is one of the most frightening things to most people. It is also the third most common cardiac event and often the most unexpected. Suffering a disabling stroke can alter not only your life, but the lives of your loved ones. Preventing something so devastating and long lasting might do it! This type of event may seem an unusual outlier and not something to worry about, but statistics tell a different story. According to the National Stroke Association, stroke is the 3rd leading cause of death, killing 137,000 people each year, and is a leading cause of serious, long-term adult disability. The PLAC test should be a standard part of your health monitoring plan. It tracks the possible build-up of the artery rupturing plaque that doesn't show up on the standard tests that you may normally get during an annual physical.

Think back to your own personal, health history. Do you have a grandparent or parent who suffered a stroke? This is a clear indicator that you are at a higher risk of stroke. Consider Bill's story: His father suffered a debilitating stroke after 40 years of smoking, no exercise and a fat-laden diet. His mother became house-bound taking care of his father for years and Bill's children barely knew their grandfather. This certainly wasn't the retirement that Bill's dad had in mind! When he saw the suffering that his father went through Bill decided it was time to make a change. He had started his family later in life and has every intention of seeing his children raise their own children and being able to enjoy them.

Although Bill knew that he should lose weight because his clothes had been steadily growing over the years, but he didn't realize the truly poor state of physical health until he had some basic tests and discovered that he is at an extremely high risk of stroke due based on the results of his PLAC test. He now knows that his LDL or "bad" cholesterol needs to be even lower than what is considered good for most people. After making some serious lifestyle changes and sticking to his new healthy living plan Bill

is on the road to better health and a longer, happier old age. He is also fitting into his old clothes again and feels good.

So you may not be too concerned about fitting into smaller jeans but that isn't the only benefit to a healthier lifestyle. Continuing to enjoy the mobility and independence you now have for many years into the future is a crucial component of a long life. Living a long time isn't as much fun when you can't do what you enjoy.

Body Image: A Powerful Motivator

The unique WIN the Rockies program focused on enjoying healthy food and making physical activity enjoyable and easy to fit into their lifestyle so that people would not feel that they were deprived or suffering while reaching health goals. But one major motivator is how other people see us. Feeling overweight or unattractive compared to slimmer people can make it difficult to get started on a health program. According to a study called "The Power of Others to Shape Our Identity: Body Image, Physical Abilities, and Body Weight³" other people have a huge influence on not only how we feel about ourselves but whether we even feel competent enough to make a difference in our health and our bodies.

Other people profoundly influence individuals' feelings about their own body and physical abilities which are important dimensions of personal identity and key factors related to lifestyle and body weight. The study found that people can be strengthened by other people through praise or support or made to feel embarrassed or ridiculed by their criticism or teasing. In order to feel competent to adopt and maintain a healthy lifestyle, people need to feel worthy to live it. Suggestions and recommendations are provided in the study to assist people with how to support others. If you are the person looking to make a change to a healthy lifestyle you need to get your support team in place before you get started. These include people or groups that can:

- Cheer you on when you make healthy choices and see progress toward your goals,
- Share your goals so that you feel that you have a partner to work with and share experiences with, both successes and failures,
- Believe that you have the ability to reach your goals and encourages you to keep trying, and
- Provide support when you feel discouraged that you made a mistake so that you stay on the path toward success.

Sometimes this is a spouse, but many times spouses have adopted the same unhealthy lifestyle choices so they may not be the best option. Tapping a friend who has a positive attitude or joining a healthy living group through your community center or doctor's office may be a good place to start. Although popular group diet programs don't always work, the benefit of having a group of people to report to and be held accountable to can improve the chances that dieters will be able to stick to their diet. A study showed that even a text message every day asking what people had eaten or reminding them to get moving made a positive difference in their ability to stick to the diet in the long term. The idea that others are watching and paying attention to what you are doing is a powerful force for guiding behavior.

Giving yourself rewards that will encourage you to continue forward and to keep monitoring your progress can be helpful tools as well. Obviously rewarding yourself with a hot fudge sundae would be fun, but not the right kind of reward. A new outfit that fits your healthier body or time with a loved one doing something physical would be effective and keep you headed in the right direction.

Willpower: Practice Makes Perfect (At Least Much Better)

The good news is that once you begin a health program and stick to it for at least 3 weeks, your body adjusts and continuing with it becomes easier. Research has shown that it takes 21 days for a new habit to become ingrained. Willpower is as much as habit as anything else. An article in the New York Times in 2008⁴ explained that although our willpower seems to be limited, in other words it's too difficult to

try to quit smoking and losing weight at the same time, we do have the capacity to improve our willpower like a muscle. There are quite a few theories about why this is true, focusing on biological changes in the brain. One is that neurons in the brain that control planning behavior or cognitive control get better at utilizing blood sugar more efficiently with repeated challenges. Another is that one of the chemical messengers in the brain is produced in larger quantities when it is frequently depleted from a lot of use. In addition, exercising your willpower in a particular area will make it easier to do so with something else. Once you tackle one area that you are trying to control, like adding exercise into your schedule, then move on to another area rather than trying to do both at the same time. It's not clear why practicing your willpower in one area can help you in another one, but it works.

What Is the Best Plan For You?

There are so many ways to improve your health that it may seem a daunting task to select where to start. Since research shows that you only have so much willpower you should tackle any serious health issues that you have first. If you have taken the first step of getting baseline testing done then you already have in hand the information you need to select your first goal.

High LDL Cholesterol, Low HDL Cholesterol or high Lp-PLA2 – If this is your primary area of concern take a look at your diet. You will need to increase your intake of fruits, vegetables and whole grains. There are specific foods that increase your HDL or “good” cholesterol like fish, especially fatty fish likes salmon, sardines, herring, mackerel and sea bass. Eat purple skinned fruits and some nuts like almonds and walnuts. Even a glass of red wine will help.

Stay away from refined sugars and carbohydrates like white bread and pasta and sodas. Substitute water, unsweetened iced tea, fresh fruit, unbuttered popcorn and unsalted nuts for high calorie, refined foods. Make sure to include some healthy fats in your meals like avocados, nuts and legumes. As with any positive change you should make sure to add in some consistent exercise. You don't need to be an

Olympian, consistency is what matters. Many people feel emotional benefits from exercising after only 2 weeks and it is a proven way to raise your HDL cholesterol levels.

High Glucose Serum Level – This indicates diabetes or metabolic syndrome. Your first course of action should be beginning an exercise program and losing weight. According to the American Diabetes Association just 30 minutes a day of moderate physical activity coupled with a 5-10% reduction in body weight produced a 58% reduction in diabetes. 90% of type 2 diabetes is caused by obesity and losing weight can halt the progression of prediabetes, also known as metabolic syndrome, and possibly prevent it completely.

Hypertension – Your risk of stroke or heart attack is dramatically increased if you have high blood pressure or hypertension. The primary dietary change that most effectively lowers high blood pressure is reducing your salt intake. Even a small change in your blood pressure can have a huge impact on your cardiovascular health. The changes in blood pressure have been seen to be even greater in the African American population. Decreasing the amount of salt in your diet, increasing the amount of potassium, reducing your alcohol consumption and following the DASH (Dietary Approaches to Stop Hypertension) diet developed by the National Heart, Lung and Blood Institute at the National Institutes of Health can greatly reduce your risk of cardiovascular disease due to high blood pressure.

How to Maintain Your Pace

If you have made good progress you need to stay the course to reach your goals and not slack off after a great start. Once you've gotten going, continue to monitor your progress so that you are always aware of where you are. Tracking foods eaten in a food diary has been shown to be very successful. Continue to step on the scale every day so that you can see the steady progress. Get periodic blood tests at independent testing laboratories to monitor the progress toward lowering your overall cholesterol, raising your HDL cholesterol, or reducing your blood sugar levels. Consistency lays the foundation for

better habits in all areas. For example, a study conducted by researchers at the Department of Health and Human Development at Montana State University⁵ found that moderate physical activity could act as a gateway behavior to other healthy behaviors. The participants in the study who had been moderately physically active for 6 months or more had healthier diets in contrast to participants who were thinking about becoming physically active or not even close to thinking about it.

A community-based research, intervention and outreach project to improve health in Idaho, Montana and Wyoming called Wellness In the Rockies (WIN the Rockies)⁶ focused on the guiding principles that people have responsibility for their own health, but communities must create environments that foster good health and provide health options. The overall goals, to enhance the well-being of individuals by improving their attitudes and behaviors related to food, physical activity and body image and to help build communities' capacities to foster and sustain these changes focused on getting healthy rather than weight loss. Interestingly, the focus on prevention and better health, through small diet and physical activity changes, can cumulatively make a significant contribution to the maintenance of a health weight.

Most communities haven't made the efforts that those in the WIN the Rockies program did, so we all have to find our own way to make exercise and a healthy diet part of our daily lives. Look for ways to incorporate physical activity into your day. Are there bike paths or hiking trails near your house? Is there a gym on the way home from work? Could you squeeze in some pushups or squats while watching your child at the playground? Making healthy meals on Sunday that you freeze for use during the week may discourage you from stopping for fast food on the way home because it's late. Weaving fun into your lifestyle changes is critical to maintaining your new habits into the future. Transitioning from the first, hard push to make changes into daily choices is an important part of long-term planning for reaching your goals.

You've Reached Your Goal, Now What?

Once you reach a goal, whether it's healthy eating, losing weight, or lowering your cholesterol, you can't just drop everything and relax. Was this only one part of your overall plan? Then it's time to get going on the next one, especially if you've been exercising your willpower. It's stronger now and ready to take on another challenge. Maybe you made it to the first, minimum goal, but you've seen that you can be successful so you can set yourself a more difficult one.

Changing one small area such as moderate physical activity has been shown to lead to other healthy behaviors such as diet. If you have been able to include a simple change such as a walk after dinner or a workout session before work you may notice that you feel better. This might encourage you to eat lighter to maintain the good feeling from your physical activity. Maybe if you know you'll be exercising tomorrow morning you'll have only one cocktail before dinner tonight. Our bodies want to feel strong and healthy so you may need to feed it more and more healthy behaviors.

Researchers have also been looking at what people who have been successful at reaching their goals and *maintaining* their new weight or cholesterol do. Successful people don't just do things once and drop it. They make a change and continue doing it. Those who have lost weight and kept it off continue to exercise 5 to 6 days per week for 45 minutes to one hour. They also continue to monitor their weight by weighing themselves daily and those who have reached their cholesterol goals continue to have it checked easily at independent testing facilities between doctor's visits to be sure that they are still at their goal. If they get out of range by more than 2 pounds or 10 cholesterol points, it's time to rein themselves in again and get back on track.

Success takes effort, grit, perseverance and planning. If you know this in advance you have a much better chance of getting where you want and reaping the benefits of your hard work. Thinking that this will be easy, whatever the change is you are trying to make, can derail you the first time you hit a rough

patch. Decide in advance how you will handle parties, what you will eat and drink, whether you can fit in a workout session before you go to help you feel good about yourself and your body. We all fall off the wagon every once in a while but you have to have a plan for getting back on.

Setting health goals, determining how you are going to track them and then monitoring your numbers over time isn't just a one shot deal. To stay healthy for an enjoyable old age or to lose weight and keep it off you can't look at the changes you make as a "diet" or temporary. You need to find ways to incorporate the changes into your life so that they become habit.

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²**ANY LAB TEST NOW®**, Independent Laboratory Tests at www.anylabtestnow.com and on Facebook at www.facebook.com/anylabtestnowcorp.

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