

Optimus Mission & Vision

To provide research-based, lifestyle interventions designed to reduce the risks for chronic diseases.

We strive to provide a positive, safe, and comfortable environment to help you achieve your personal health and wellness goals.

Optimus staff members are experienced health and wellness professionals. Optimus has state of the art fitness equipment for total body conditioning and various services to better your health and fitness.

HOURS

Monday-Thursday:
6am-1pm and 4-7pm
Friday 6am-1pm
Saturday: 7am-noon

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New Year Resolutions – Changing a Habitual Behavior

By Dan A Smith, MS ACSM RCEP

Well, it's that time again, time for New Year resolutions. I once heard that the best New Year's resolution was not to make a New Year's resolution. That may be good advice. According to Wikipedia, a New Year resolution is a commitment that an individual makes to one or more lasting personal goals, projects, or the reforming of a habit. Recent research shows that while 52% of participants in a resolution study were confident of success with their goals, only 12% actually achieved their goals. A separate study in 2007 by Richard Wiseman from the University of Bristol showed that 78% of those who set New Year resolutions fail. Men achieved their goal 22% more often when they engaged in goal setting (a system where small measurable goals are set; such as losing a pound a week, instead of saying "lose weight"), while women succeeded 10% more when they made their goals public and got support from their friends. (www.quirkology.com/UK/Experiment_resolution.shtml). Nevertheless, the beginning of a new year warrant some contemplative time about health. Regardless of whether you make a New Year resolution at the beginning of the year, or you simply want to make a lifestyle change anytime throughout the year, the fundamental principles are the same. It is one of the most difficult challenges a person can undertake. Negative health habits typi-

cally have been reinforced by years of engaging in the behavior, by emotional factors that originated in the past, by negatively reinforcing social networks and by the cultural environment in which we reside. But change is possible, and some of the important components of the behavior change process can be summarized in Figure 1 below. One of the most critical components to consider in this process is an individual's readiness to make the change. We refer to this as the

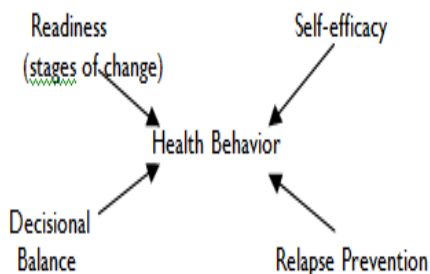


Figure 1

“Stages of Change (SOC)” and it is based on the Transtheoretical Model (TTM) of behavior change developed by Dr. James Prochaska and Dr. Carlo DiClemente in the early 1980's (J Consult Clin Psychol. 1983; 51(3):390-395).

There are 5 stages to the TTM of behavioral change. These are summarized in Table 1 to the right. It is important to recognize that people usually do not progress through these stages in a “linear” fashion. It's much more likely they will cycle back and forth between stages as the behavior gradually becomes part of their new lifestyle. Successful strategies for making a permanent lifestyle change include setting very specific goals (Table 2), identifying good support systems and setting up a process of reinforcement and reward. An impor-

Table 1:

Stage	Characteristics
Precontemplation	Individual is not thinking about changing behavior
Contemplation	Individual is thinking about changing behavior, but has not initiated any changes in behavior
Preparation	Individual has initiated changes in behavior, but is not at recommended or optimal levels of new behavior.
Action	Individual has initiated change, is at the recommended or optimal level, but has not maintained this level consistently for 6 months or more.
Maintenance	Individual has initiated change, is at the recommended or optimal level, and has maintained this level consistently for more than 6 months.

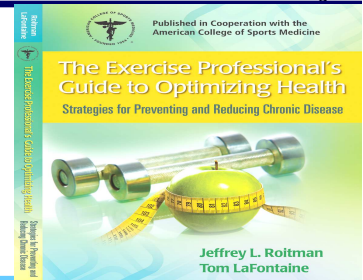
Table 2: Setting Smart Goals

S pecific
M easurable
A ttainable
R ealistic
T imely

tant piece to this success is self-efficacy, "you must believe to achieve". So, as we begin the New Year, take a moment to reflect on the things that are most important to you. If you feel there are areas in your life that you want to improve

or change, choose just one or two, develop a realistic perspective, expect to encounter some bumps along the way, and perhaps most important, believe in yourself and your ability to be successful. For additional information about changing a habitual behavior refer

to Chapter 10 in the book by Tom LaFontaine and Jeff Roitman, see sidebar. If you are techy, there are several apps and websites out there that can help you on your journey to success. One of my favorite is the "Super Tracker" available at www.choosemyplate.gov.



What's the Best Walking Speed to "Postpone Death"?

In a rather interesting study out of Australia, scientists determined that walking at 3.0 miles per hour or faster was best in order to "outpace" the Grim Reaper or the "Angel of Death"! Seriously, an Australian group of scientists from universities, hospitals, and medical schools collaborated to estimate the optimal walking pace to extend life and maintain functional capacity with age. They measured the walking speed of 1,705 men over age 70 by timing how long it took

them to walk 20 feet. The results showed that men who walked faster than 1.8 mph (the estimated pace of the Grim Reaper) were less likely to die over the 5-year follow-up period. Men who walked 2.0 mph were 1.23 times less likely to die while all participants who walked 3.0 mph or faster were ALIVE at the end of the five year period!! The study was published in the British Medical Journal, www.bmj.com/content/343/bmj. Other studies



Tom LaFontaine, PhD, ACSM RCEP

also have shown a correlation between walking speed and mortality including one published in the Journal of the American Geriatric Society that established that a slower walking speed was associated with a greater risk of disability. Visit with one of our Professional Staff and discuss how to gradually and safely increase your walking speed within your limitations, and perhaps optimize your odds of meeting the Grim Reaper after age 100 years!!

Study Confirms Small Servings of Lean Beef Can be Part of a Healthy Diet!



A recent study published in the American Journal of Clinical Nutrition shows that small servings of lean beef can be included in a healthy diet. The research was part of the BOLD study (Beef in an Opti-

mal Lean Diet). The authors used the DASH (Dietary Approaches to Stopping Hypertension), www.dashdiet.org, as the background healthy diet. Subsequently they randomized thirty-six adults (30-65 years of age) with moderately elevated LDL cholesterol to four diets. The subjects consumed each diet for five weeks each. Measurements of lipids were taken prior to the study and after each five week period. Three of the four diets were similar in composition with the exception that two of them allowed 4 ounces and 5.4 ounces

of "LEAN" beef per day. All of the diets were low in fat and saturated fat. The BOLD-Plus diet was 27% protein while the other diets allowed about 17-19% of calories from protein. The two diets which included small amounts of lean beef resulted in a similar lowering of LDL cholesterol 10%. The authors concluded that the BOLD study shows that reasonable and small amounts of lean beef can be included daily as part of a heart-healthy diet that improves risk factors for cardiovascular disease. As most of

Tom LaFontaine, PhD, ACSM RCEP

you know "LEAN" beef refers to cuts like sirloin, round, and tenderloin. Please notice this does not include processed meats such as hamburger, all-beef hot dogs, bologna, pastrami, etc. which are clearly associated with increased risk for type 2 diabetes, heart disease, and several cancers. So you can have your beef and eat it to, just in small lean amounts.

Member Spotlight : Lee Landes

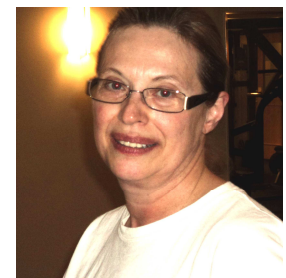
Lee Landes became a member of Optimus in September, 2009. She had recently completed a Cardiac Rehabilitation program at a local hospital after having been diagnosed with Cardiomyopathy. She had an Ejection Fraction (EF) of about 25%. EF is the percentage of blood pumped out of the heart ventricles with each heart beat. Healthy individuals who typically have EF's of 50% - 75% and values below 40% usually result in a diagnosis of Congestive Heart Failure (CHF). So you can see that Lee had some serious con-

cerns. Lee started working with Optimus Personal Health and Fitness Mentor (PHFM), Dan Smith, MS, RCEP, in the fall of 2009. Lee is a Middle School teacher in Columbia, which can be quite stressful and demanding, yet she rarely misses a session with her coach. She has also participated in Hannah's weight management class this fall and continues to work on improving her food choices and watching her portion sizes. Since having had a significant challenge in her health status, Lee has

By Dan A Smith, MS ACSM RCEP

looked closely at what she chooses to do with the rest of her life. Lee has said that, "Being involved in a life long, comprehensive, health and wellness program, such as what is available at Optimus, is something that I realize is essential to my future well being". Lee recognizes the importance of balance in her program and has promised her PHFM that she will stay focused and confident that she can be successful. Recently, Lee had a follow up visit with her cardiologist and after extensive testing

and blood work she received the report. According to her doctor her EF is now about 45% which is as close to "normal" as her cardiologist is willing to say. Congrats Lee! Keep up the good work!



Celsi and Jordan Compete in the 12-17-2011 Kirkwood Weightlifting Club Winter Challenge

Optimus staff members Celsi Cowan and Jordan Kroell competed in the Kirkwood Weight-



lifting Club "Winter Challenge" Olympic weightlifting meet on December 17th, 2011 held at Nipher Middle School in Kirkwood, MO. The competition consisted of the Snatch and Clean and Jerk lifts. In weightlifting the overall winner is determined by adding the highest successful attempt in both lifts and rendering an overall contest "total." Celsi competed in the women's 58 kgs (127.6 lbs) weight class. Jordan competed in the 77kgs (169.4 lbs) weight class. In the Snatch, Celsi opened with a successful attempt at 35kgs (77lbs) and then made a successful attempt at 39kgs (85.8lbs). On her 3rd attempt, Celsi made a valiant effort at a 44kg (96.8lbs) snatch, but was

unable to complete the lift. In the Clean and Jerk, Celsi opened with a successful attempt at 45kgs (99lbs), and then made two close attempts at 52kgs (114.2lbs) jerk but the lifts were unsuccessful. This gave Celsi an 84kgs (185lbs) total good enough to win her class. Celsi weighed 55.5kgs (122.1lbs). Jordan opened with 80kgs (176lbs) and then made 85kgs (187lbs) in the Snatch. He just missed a 90kgs (198 lbs) attempt. In the Clean and Jerk, Jordan made 103kgs (226.6lbs) and then 110kgs (242lbs) with a close, but unsuccessful attempt at a 112kgs (246.4lbs). Jordan weighed 70.5kgs (155lbs) and

By Jordan V. Kroell BS, NSCA-CSCS

made a total of 195kgs (429lbs) and won first place in the 77kgs weight-class.



Tips for Losing Your "Unwanted Baggage" in 2012 and Keeping it Off Tom LaFontaine, PhD, ACSM RCEP

Considering that 70% of US citizens are either overweight or obese, it's not surprising that one of the most common New Year goals is weight loss. Here are some tips for increasing the chances of being successful with your 2012 weight loss goal. Also review the lead article by Dan Smith, for some additional suggestions on making the lifestyle changes that are absolutely necessary for success!

* Announce your goal to your spouse, significant other, family, and friends and seek their support and encouragement

* Get 7-8 hours of sleep as studies show that losing sleep is associated with weight gain

* Reduce calories and "portion sizes" while keeping a healthy balance of lean protein, high fiber non-processed carbohydrates, and healthy fats (consider the DASH Diet with reduced calories, www.dashdiet.org)

* Keep a routine including doing things like tracking physical activity and food intake (consider the new USDA application available at www.choosemyplate.gov and search for the "SuperTracker" or look for and download an applica-

tion for your smartphone), reducing TV and screen time, always eating at the dining room table using smaller plates, having family meals regularly, always exercising at the same time, etc.

* Make weight loss a family event/ affair which can help the entire family lose weight if necessary or learn healthy eating and exercise habits that can prevent weight gain in the future

* Exercise and/or be physically active by scheduling 30-60 mins of exercise daily, standing more, avoiding sitting for prolonged periods (>45-50 minutes), engaging in

active recreational pursuits, taking family hikes, bike rides on trails, taking stairs instead of elevators, wearing a pedometer and working towards 10,000 steps per day,

* For more information on weight loss and maintaining weight lost, check out the National Weight Control Registry at

www.nwcr.ws.

All of us at Optimus wish everyone success at achieving their 2012 goals!!

Holiday Guest Pass!

We would like to announce our Holiday Friends and Family Guest Pass. These are available for members to purchase for their friends and family until January 31st, 2012. The cost is \$40+tax, half price off our regular punch card charge. These passes are not available to punch card holders, but designed as gifts for our regular members to give to friends and family.

HOLIDAY FRIENDS & FAMILY GUEST PASS

This pass is good for 10 visits to Optimus.

Present this card each time you check-in at Optimus.

We hope you enjoy our state of the art facility with top of the line equipment and knowledgeable staff.

Facility Hours:

Mon-Th 6am-1pm & 4pm-7pm; Fri 6am-1pm

Sat 7am-12pm

Dr. Mayer's Seminars for January & February

Tuesday, January 24th, 12:15-12:45pm
 "Is there a number "ONE" in any team?"

Tuesday, February 21th, 12:15-12:45pm
 "Why is it so easy to get angry?"

In our seminar room across the hall from Optimus



Kate Walker & Dr. Shelly Frazier Qualify for World Drug Free Powerlifting Meets! Tom LaFontaine, PhD, ACSM

Kate Walker and Dr. Shelly Frazier, MD, Optimus members, competed in the American Drug Free Powerlifting Federation meet held at the University of Missouri Campus Recreation Center on December 17, 2011.



The meet was sponsored by the University of Missouri Strength Club. Kate competed in the 70 Kgs (154 lbs), 60-64 year old age group and weighed in at 69.9 Kgs (153.8 lbs). Shelly competed in the 55.5 Kgs (122.2 lbs), 40-44 year old age group and weighed in at 53.2 Kgs (117 lbs). Kate lifted 80 Kgs (176 lbs) in the squat, 45 Kgs (99 lbs) in the bench press, and 110 Kgs (242 lbs) in the deadlift. Kate attempted three additional lifts but missed personal records in the squat at 85 Kgs (187 lbs), 50 Kgs (110 lbs) in the bench press, and 117.5 Kgs (258.5 lbs) in the deadlift. Kate's third attempts in the squat and the

deadlift were very close "near misses" and she should make these at her next competition. Shelly succeeded with 55 Kgs (121 lbs) in the squat, 65 Kgs (143 lbs) in the Bench Press (an unofficial open class and 40-44 year old world record), and 95 kgs (209 lbs) in the deadlift. All these lifts were official meet personal records for Shelly. She also made an attempt at 67.5 kgs (148.5 lbs) in the bench press. Their lifts were national records for their gender, age and weight categories. They both qualified for the World Singles Championships in France in July, 2012 and the World combined lift competition to be held in Boston

in October of 2012. The pictures show Kate attempting her 85 Kg (187 lb) squat and Shelly completing her 95 Kg (209 lb) deadlift. Congratulate Kate and Shelly when you see them at Optimus!



Maximal Exercise Capacity is the Key to "Healthspan" and Lifespan

Maximal oxygen uptake (VO₂max) or the maximal capacity to take in and use oxygen during exhaustive aerobic exercise is considered by most exercise physiologists to be the number one marker of cardiovascular fitness. VO₂max is most often determined by collecting the air a person is exhaling while walking on a treadmill at progressively harder intensities (Metabolic Exercise Test). Heart rate, perceived exertion and sometimes blood pressure and ECG are monitored during the test. See picture at right which shows Tom LaFontaine administering a Metabolic Exercise Test to an Optimus client. VO₂max is dependent upon two primary factors; 1. how

much blood the heart can pump per minute or the cardiac output, and 2. how much oxygen the exercising muscles can "extract" or take out of the circulating blood. VO₂max reflects the aerobic fitness and health of the heart, lungs, and muscles. VO₂ max is expressed as milliliters of oxygen uptake per kilogram of bodyweight per minute (mls/kg/min). After age 20-25, VO₂ max decreases by 5-9% per decade in persons who choose to be sedentary. The good news is that an active lifestyle can slow the rate of this decrease. In the US, 20 year old sedentary males average 45-50 mls/kg/min while 20 year old females average 35-40 mls/kg/min. At the average age of "death" a sedentary man may

have a VO₂ max as low as 18 mls/kg/min and a sedentary woman less than 15 mls/kg/min. This low VO₂max makes it difficult to perform activities of daily living. If one becomes and remains physically active throughout their life, at age 76 a male can sustain a VO₂ max of 30 mls/kg and a female 25 mls/kg/min. These active men and women may live 100 years before their VO₂max falls below 18 and 15, respectively! Numerous studies have shown that a higher VO₂max is associated with a longer healthy life as well as increased longevity. Many experts believe that VO₂max is the BEST marker of health status and suggest that the VO₂max test should become one of the vital signs of health (temperature, blood pressure, heart rate, height,

Tom LaFontaine, PhD, ACSM RCEP weight) and be assessed in everyone.



At Optimus, Tom LaFontaine, PhD, and Joe Company, MS, www.endurancecompany.com, administer Metabolic Exercise Tests. For more information, visit with or e-mail Tom at fithealth@aol.com.

Optimus "Member Get a Member" Program Still in Effect!



Have an acquaintance who needs a New Year's resolution jump start? Refer someone and take advantage of our "**Member Get a Member Program**". Any present Optimus member will receive a month for free if their referral joins Optimus for six months. Talk to staff for more information on how this program works and think about your friends who perhaps need to focus on their health and fitness more. There's no better place for them to get assistance than Optimus!! Also, don't forget that immediate family members (spouse, adult children, parents) are eligible for a 50% discount off regular membership prices.

Weight Loss Reverses the Effects of Aging on Heart Blockages

Tom LaFontaine, PhD, ACSM RCEP

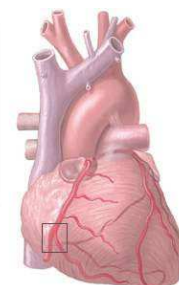
Aging is a major "risk factor" (RF) for the development and progression of coronary atherosclerosis (buildup of plaque in the coronary arteries that supply blood to the heart). Obviously this a "non-modifiable" risk factor for this disease which accounts for 25% of all deaths each year. On the other hand over 90% of atherosclerosis is caused by six "modifiable" RFs including high

cholesterol, high blood pressure, diabetes, smoking, sedentary lifestyle, and obesity. We have considerable control over these RFs and can optimize them if we choose to. Recently the authors of an article published in the September 2011 issue of the American Journal of Medicine reported that a 10% nationwide reduction in body mass index (weight in lbs divided by height in inches squared) would

offset 80% of the projected rise in heart disease due to aging alone between 2010 and 2040. However, a 10% increase in body mass index would more than double the expected rise in heart disease cases due to age. As has been shown hundreds of times over the past 50 years, this study again illustrates that each and every one of us has considerable control over our health destiny!!



Blockage in right coronary artery



Nutrition Corner: Iron– It Gives You Energy!

By Hannah Holzum, BS, RD/LD, ACSM CHFS

Iron is an essential mineral many people know little about. It is a part of the red blood cells. The main function of iron is to help carry oxygen bound with hemoglobin from the lungs to the muscles and other organs. About 30% of the body's supply of iron is in storage, ready to be replaced if any is lost. When iron is low, oxygen consumption slows down. Iron deficiency is more common than many think. It is estimated that only 65-70% of all Americans meet their daily recommended intake. When depleted, oxygen circulates more slowly. If the body is low in iron, fatigue, irritability and headaches may occur. If the deficiency becomes significant,

this can lead to anemia. If left untreated, anemia can be serious, with potentially life-threatening complications. There are several select groups of people that are more at risk for developing iron deficiencies. First, pre-menopausal women are more likely to develop this problem due to pregnancy or the loss of red blood cells during menstruation. Further, adolescents, both males and females, may be lacking in iron due to their rapid growth processes. Also, athletes, especially runners and other endurance athletes may be at risk. This is because exercising regularly can cause iron loss. Many foods are great sources of iron. An important part of any

healthy diet is to eat a variety of foods; such is the case with iron. Sources include dark, leafy greens (spinach), beans, whole grains, red meat, fish and poultry. There are countless ways to eat enough iron. Supplements are rarely needed. Not only are these all great sources, but whole grain pastas and breads are enriched with iron. Vitamin C aids in iron absorption while coffee and tea may inhibit its absorption. The National Institute of Health recommends the average male should consume about 8 milligrams of iron each day. For women, it varies based on the age. Women, ages 19-50 need more than most people, up to 18 milligrams. On the other

hand, women over 50 and males only need 8 milligrams. The maximum recommended before toxicity might occur is 45 milligrams.



“A wise man should consider health as the greatest of human blessings, and learn how by his own thought to derive benefit from his illnesses.”

-Hippocrates

Feature Recipe: Black Bean Smothered Sweet Potatoes



Ingredients:

- 2 medium sweet potatoes
- 1 15-ounce can black beans, rinsed
- 1 medium tomato, diced

- 2 teaspoons extra-virgin olive oil
- 1/2 teaspoon ground cumin
- 1/2 teaspoon ground coriander
- 1/4 teaspoon salt
- 2 tablespoons reduced-fat sour cream
- 2 tablespoons chopped fresh cilantro

Preparation:

1. Prick sweet potatoes with a fork in several

places. Microwave on High until tender all the way to the center, 12 to 15 minutes. (Alternatively, place in a baking dish and bake at 425 F temperature until tender all the way to the center, about 1 hour.)

2. Meanwhile, combine beans, tomato, oil, cumin, coriander and salt in a medium microwave-safe bowl; microwave on High until just

heated through, 2 to 3 minutes. (Alternatively, heat in a small saucepan over medium heat.)

3. When cool enough to handle, slash each sweet potato lengthwise, press open to make a well in the center and spoon the bean mixture into the well. Top each with a dollop of sour cream and a sprinkle of cilantro.

Nutrient Facts (per serving)

<i>Calories</i>	351
<i>Total Fat</i>	7g
<i>Carbohydrates</i>	61g
<i>Protein</i>	11g
<i>Fiber</i>	12g

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Member Birthdays

January

- Julie Caplow 1/1
Charlie Digges, Sr. 1/5
Pat Okker 1/7
Ann Creighton 1/10
Betsy Vicente 1/10
Jane McElroy 1/10
Daisy Grossnickle 1/11
Monica Miller 1/14
Mason Stevens 1/17
Daniel Atwill 1/18
Richard Hanson 1/20

- Ken Maurer 1/29
Tim Myers 1/29
Robert Murray 1/31



February

- Von Pittman 2/1
Richard Edgar 2/2
Susan Woods 2/4
Vicki Parker 2/4
Susan Gerling 2/8
Barbara Bunton 2/10
Frank Higgins 2/10
Herb Willbrand 2/11
Robert Barrett 2/12
Jill Walker 2/13
Shelly Frazier 2/13

- Scott Ward 2/19
Jim Ollar 2/25
Lydia Roebuck 2/28



Inclement Weather

In the event of inclement weather, please check out our website homepage for closing announcements:

www.optimushealth.com

Upcoming Local Running/Walking Events

Runner's Choice 10K/20K, Sat. Jan. 14th; from 8-10:30am starting at t4500 Bethel St., Columbia, MO

Nut Race 5K Run/Walk, Sat. Feb. 4th from 9-10am at Carrie Francke Dr. at Research Park Dr., Columbia MO

Love to Run 4 Mi Run/Walk, Sat, Feb. 11th, from 9-10am, beginning at 4500 Bethel St., Columbia MO

For more information visit the Columbia Track Club Website www.columbiatrackclub.com

The Insurance Group

200 East Southampton Drive
Columbia, Missouri, 65203
573-875-4800

January

- National Glaucoma Awareness Month
- Thyroid Awareness Month

February

- American Heart Month
- National Wise Health Consumer Month

WEEKLY CLASS SCHEDULE:

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	8am Tai Chi		8am Tai Chi		
	5pm Hatha Yoga		4:30pm Hatha Yoga		

Articles in *Optimus Connection* are contributed by the health and wellness professionals of Optimus. Information and recommendations presented in this newsletter are research-based and are given in the best interest of Optimus members and the Columbia community. Please contact Optimus to speak with any of our experienced staff if you have any questions or concerns regarding the content of this newsletter. Newsletter formatted by Brianna Heese and edited by Tom LaFontaine, PhD, and other Optimus staff members.

