

### Risky Business: Understanding Risk Factors

By Brian Unverferth

So what's your risk of having or developing cardiovascular disease? A question you may have once posed to yourself, should be addressed by everyone concerned with their health. Being aware of your risk factors is an integral part of understanding the likelihood of developing cardiovascular disease (CVD). The American College of Sports Medicine (ACSM) has created a set of risk factors addressing this issue.<sup>1</sup>

The following is not an all encompassing, all inclusive list but a set of well established, clinically relevant criteria utilized by clinicians to establish guidelines for risk stratification. (There are several less established risk factors that seem to have a promising predictive value, but have yet to be collectively agreed upon.)

Positive risk factors, increasing your risk for CVD:

**Age:** Men  $\geq 45$  yr; Women  $\geq 55$  yr

**Family history:** Heart attack, coronary revascularization, or sudden death before 55 years of age in father or other male first-degree relative, or before 65 years of age in mother or other female first-degree relative.

**Cigarette smoking:** Current cigarette smoker or those who quit within the previous 6 months or exposure to environmental tobacco smoke.

**Sedentary lifestyle:** Not participating in at least 30 minutes of moderate-intensity physical activity on at least five days of the week for at least three months. *Studies have consistently shown that low aerobic fitness is a more important precursor to all-cause mortality than any other risk factor.*<sup>2,3,4,5</sup>

**Obesity:** Body mass index  $\geq 30$  kg·m<sup>2</sup> or waist girth  $>102$  cm (40 in) for men and  $>88$  cm (35 in) for women.

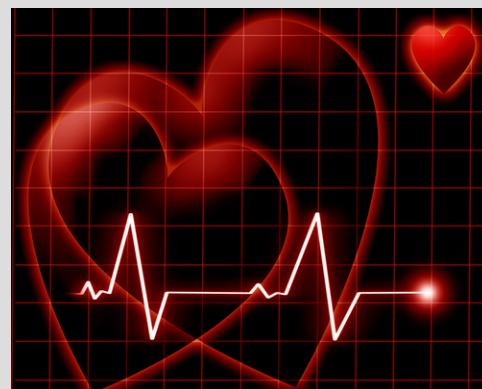
**Hypertension:** Systolic blood pressure  $\geq 140$  mm Hg and/or diastolic  $\geq 90$  mm Hg, confirmed by measurements on at least two separate occasions, or on antihypertensive medication.

**Dyslipidemia:** Low-density lipoprotein cholesterol  $\geq 130$  mg·dl<sup>-1</sup> or high density lipoprotein cholesterol  $<40$  mg·dl<sup>-1</sup> or on lipid-lowering medication. If total serum cholesterol is all that is available use  $\geq 200$  mg·dl<sup>-1</sup>.

**Prediabetes:** Fasting plasma glucose  $\geq 100$  mg·dl<sup>-1</sup> but  $<126$ mg·dl<sup>-1</sup>.

Negative risk factor, decreasing your risk for CVD:

**High-serum HDL cholesterol:** High-density lipoprotein



protein cholesterol  $\geq 60$  mg·dl<sup>-1</sup>.

These risk factors do not mean you are guaranteed to have a heart attack. A more holistic approach should be used when analyzing what these factors mean. A traumatic event can be avoided by simple lifestyle changes. Research indicates that combating the modifiable risk factors can significantly decrease the risk of CVD. When you hear someone state "my genetics won't allow me to be healthy," remember the aforementioned list. Most of the listed risk factors are modifiable. While the risk factors are not necessarily causal relationships, improving them will certainly improve your odds. On top of this, physical activity is a greater predictor than family history.<sup>3</sup> Always remember: nature deals the cards, but you play the hand. So how do you live a long, happy life? Fend off the donuts, put down the cig, and keep your butt moving! Exercise is by far the best thing you can do to improve your health and well-being. Refer to the ACSM guidelines for recommended frequency, intensity and modality.

<sup>1</sup> ACSM's Guidelines for Exercise Testing and Prescription. 8th edition 2010.

<sup>2</sup> Blair SN, Connelly JC. How much physical activity should we do? The case for moderate amounts and intensities of physical activity. Res Q Exerc Sport 1996;67:193.

<sup>3</sup> Blair SN, et al. Changes in physical fitness and all cause mortality: a prospective study of healthy and unhealthy men. JAMA 1995;273:1093.

<sup>4</sup> Lee I-M, Paffenbarger RS. Exercise intensity and longevity in men: the Harvard Alumni Study. JAMA 1995;273:1179.

<sup>5</sup> Paffenbarger RS Jr, et al. Changes in physical activity and other lifeway patterns influencing longevity. Med Sci Sports Exerc 1994;26:857.

<sup>6</sup> Powell KE, et al. Physical activity and the incidence of coronary heart disease. Annu Rev Public Health 1987;8:253.

#### Inside this issue:

Understanding Risk Factors	1
Recipe	2
Up Close and Personal: FSFP Member	3
Rowing and Fitness	4
Up Close and Personal: Grad Associate	5
Spring Schedule	6



## Recipe: Easy Entrée Salad

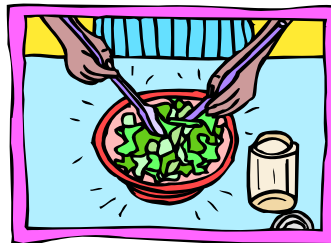
By Rebecca Nguyen

Serves 4ish, depending on hunger level

So I made this up myself a few years ago....feel free to play around with the ingredients. Substitute your favorite veggies or leave the chicken out. It's an easy and healthy dish that's super fast. Of course, you don't have to get pre-washed veggies, but it'll save time and effort on a busy night.

### INGREDIENTS

Small bag of pre-washed baby spinach  
Small bag of pre-washed broccoli and cauliflower  
Small carton of sliced, pre-washed mushrooms  
2-4 chicken breasts (can be leftovers)  
Shaved parmesan cheese (not the stuff you sprinkle)  
Lite Caesar salad dressing (I love Newman's Own)  
Whole wheat melba rounds or some other form of crunchy carbohydrate



### PREPARATION

1. Cook the chicken using a method you prefer. Season to taste.
2. Throw everything but the crackers in a huge bowl....preferably one with a nice tight lid.
3. Toss well. I like using several methods such as up and down, and circular in both directions to ensure even dressing coat.
4. Serve. Grab a handful of crackers and drop them on top.

This probably shouldn't even count as a recipe, but I consider it cooking! Enjoy :)

## UP CLOSE AND PERSONAL WITH MARK ROSE

By Justin Dials

As many of you know, Mark is a graduate student working toward his Master's degree in exercise science. He was born and raised in Canton, Ohio and takes pride in Stark County serving as a football mecca. While in high school at North Canton Hoover, the home of Ohio's reigning Mr. Football, Mark was actively involved in athletics while playing both varsity football and wrestling throughout his Hoover career. Mark took his early training seriously and could be found riding his bike many miles to practice in the early hours of the morning en route to three-a-day football practices.



Mark completed his undergraduate work in exercise physiology at Ohio University, on the Banks of The Hocking. Mark's hard work in the classroom was mirrored by his eagerness to work on various research endeavors outside of the classroom. As a fellow exercise physiology graduate of Ohio University, my past colleagues and mentors have directly expressed their gratitude for Mark's efforts and have the utmost confidence that Mark will reach his career goals and aspirations.

Here on The Banks of The Olentangy, Mark is known for his deep intellect in multiple areas of our curriculum. His reliability and willingness to 'pinch hit' and lend a hand does not go unnoticed. His colleagues describe Mark as, "a high quality graduate student" and "very considerate and always willing to help".

Mark's passion for health and wellness is evident through his active lifestyle. From his participation in high school athletics to competing in triathlons and cycling events throughout college, Mark has always enjoyed competition and training. He participated in the 2009 James Cancer Hospital Pelotonia ride to Athens and was extremely kind enough to 'pull' me to the finish line. He carries his '*practice what you preach*' philosophy to the clinical setting through his collaboration with physicians at The Ohio State University Medical Center in primary and secondary cardiovascular preventative programs. Mark is scheduled to graduate with his Master's degree in June of this year and soon after (*very soon*) will marry his lovely fiancée Lindsey. He will then begin medical school and carry his infectious passion for learning and helping others with him. Our department will surely miss Mark in many different ways and wish him the best of luck in his future endeavors.

## Outside Your Comfort Zone: How Rowing Can Help Increase Fitness Levels

By Mark Rose

Humans are creatures of habit. Most of us have set routines we follow each day to help us to be productive and get things done. It is no question that any unexpected event capable of throwing off our daily schedule can make us feel completely uncomfortable. Outside of the gym this strategy works well to keep us on track, so it makes sense that so many people adopt a similar approach to their workouts. These people may think that repeating their favorite exercises each time they come to the gym would be a great way to improve their health and fitness levels, and it is, to an extent. But the commitment to exercise displayed by these people is only one part of the equation for improvement. After some time, our bodies become accustomed to the stresses that we put on them during our workouts. If we do not increase that stress in one way or another, we will no longer see the gains we have been working toward and our fitness level will be stuck on a plateau.

One way to avoid this is to keep our bodies guessing by periodically including new exercises in our strength plans. If you have been doing the same strength training plan since you first became a member, it's time to change it up! Ask one of the GAs to help you add a few new exercises, especially for muscle groups you know you need to work on. By doing this, you will allow yourself to continuously make improvements in strength and avoid that frustrating plateau. Experimenting with different types of cardio training is another way to provide the stress necessary to elicit the gains we want to achieve. Adding an interval training workout once a week would be ideal for those of you who feel confident in your ability to handle higher levels of intensity in your workouts. Intervals are a great way to increase fitness levels quickly without investing a great deal of time.

Stepping outside of your comfort zone to learn how to incorporate a new machine into your training can also help keep those improvements in fitness coming. If you are willing to do this, and I hope you all are, I suggest trying the most overlooked piece of equipment in the FSFP gym, the rowing machine. Despite its effectiveness and ability to make every workout fun most people do not take advantage of the benefits of rowing. This is probably because rowing is not as familiar to us as running, walking, and cycling, so we avoid it. Read through the following information, it will help you learn more about rowing and inform you how to incorporate the rowing ergometer in your own exercise program.



**Muscles Used** – The rowing stroke is a repetitive, coordinated action created by the forced produced by all the major muscle groups of the upper and lower body.

**Set Up** – Begin by making sure the damper on the side of the ergometer is set between 3 & 5. This setting will feel most like a sleek, fast boat on the water. Higher settings feel more like a bigger, slower boat. Next sit on the seat, place feet on the platform and tighten the straps to prevent the feet from slipping.

**Technique** – The rowing stroke is comprised of two parts the drive and the recovery.

**The Drive** – With knees bent, hold the handle at arms length in front of you. Your upper body should be close to vertical. Extend your legs by pushing off the platform. As your legs straighten lean slightly back and pull the handle to your lower ribs in a straight line.

**The Recovery** – Extend your arms until they are straight. Lean forward, back to your original upright position. Once your hands have passed your knees flex your legs and allow the seat to slide back to the starting position.

**Workout Ideas** – The first session should be used to familiarize yourself with the rowing ergometer. Start with 3 – 5 minutes of rowing followed by walking and stretching. Repeat this up 4 times to allow your body to gradually adjust. After the first workout, you can slowly raise the intensity of your training by increasing stroke frequency or power (how hard you pull). You can also slowly increase the amount of time you spend rowing by 1 – 2 minutes per workout.

If you are interested in learning more about rowing check out the website at the following address: [www.concept2.com/us/training/default.asp](http://www.concept2.com/us/training/default.asp) There you will find a more detailed description of the rowing stroke along with a video showing each part thoroughly. There are also many more workout ideas that you could use in your own exercise program.



## Up Close and Personal with Russell Utgard

By Nate Saunders



Russell is an Emeritus professor for the College of Earth Sciences here at OSU. If you haven't met him yet, stop by and say hi. He will be the guy on the treadmill in the far corner of the FSFP gym three mornings a week. A veteran of FSFP, Russell first enrolled in the program in the late 70's, back when the facilities were at Larkins. Presently, this father of three and grandfather of five still maintains his lifelong commitment to personal health through regular physical activity. I'm sure this trend will continue for many years to come.

Do you have someone you'd like to submit for an up close and personal? Do you think there's an FSFP member that has made great improvements worthy of the newsletter? Email Rebecca your suggestions at [nguyen.780@osu.edu](mailto:nguyen.780@osu.edu).

# Spring Quarter FSFP Schedule



<b>Morning General Conditioning PE A22</b>	<b>6:30 am-8:30 am</b>	<b>M W F</b>
<b>Noon General Conditioning PE A22</b>	<b>11:30 am-1:30 pm</b>	<b>M T W R F</b>
<b>Evening General Conditioning PE A22</b>	<b>4:30 pm-6:30 pm</b>	<b>M T W R</b>
<b>Morning Swim RPAC Class Pool</b>	<b>7:30 am-8:30 am</b>	<b>M W F</b>
<b>Water Aerobics RPAC Class Pool</b>	<b>12:30 pm-1:30 pm</b>	<b>M W F</b>
<b>Yoga PE A200</b>	<b>11:30 am-12:30pm</b>	<b>W</b>
<b>Boot Camp PE A200</b>	<b>5:00-6:00pm</b>	<b>M</b>