

GEORGE MASON UNIVERSITY
College of Education and Human Development
Physical Activity for Lifetime Wellnes

RECR 118 (002) — Aerobics and Basic Conditioning (1)
1 Credit, Fall 2018
TR 10:30-11:45, 8/27-10/14 Fairfax/RAC 1200A

Faculty

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Office Hours: by appointment

Prerequisites: *None*

University Course Catalog Description:

Introduces students to fitness and healthy lifestyles. Provides students with an overview of the various types of weight training with an emphasis on circuit weight training.

Course Overview

Athletic attire is required for this class. If you do not come prepared you will be marked absent. Appropriate wear should include: t-shirt/sweatshirts, shorts or sweatpants, athletic socks and proper athletic shoes. Jeans and any type of sandal or open-toe shoe are not allowed in the gym or weight room. **Always check Blackboard before coming to class!**

Please be prepared to participate in activity the first day of class.

Cell phones/electrical devices are not permitted in class or on the weight room floor. There is no exception to this rule.

Students are required to clean RAC equipment as required by RAC policy.

Course Delivery Method: This course will be delivered using lecture / lab

Learner Outcomes or Objectives

This class enables the student to do the following:

1. Maintain a bout of aerobic exercise at a target heart rate of 60-85% of maximum heart rate for at least 20 minutes.
2. Define and calculate target heart rate and determine personal ranges.
3. Design an aerobic fitness plan that meets your current level of aerobic fitness.
4. State and differentiate between at least three different ways to condition the body aerobically.
5. Improve the student's health, wellness, and quality of life, and state at least one personal value of how aerobic conditioning contributes to lifetime fitness.

Professional Standards – Not Applicable

Required Text – None. Readings will be posted on Blackboard as needed.

Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, Tk20, hard copy).

Assignment and Examinations

- Assignments – To receive credit assignments must be submitted to Blackboard on the **due date** at the beginning of class unless otherwise directed. All other times will result in a “0.”
- Quizzes
 - **2 Written quizzes** 10 points each-Question Multiple Choice **20 points**
 - **Fitness Test** **10 points each**
 - **Target Heart Zone Worksheet** **10 points each**
 - **Aerobic Training Fitness Plan** **10 points each**
 - **Work out log** **1 point per day 14 points**
 - **Attendance** **70 Points**
 - **Total** **164 points**
- **Totals may change based on class schedule. Students will notified of changes in advance.**

Other Requirements

1. **Attendance / Lab Exercises** – (5 points will be given each day with a deduction of 1 point for each five-minutes that a student is late. Students must attend the entire class period and participate in the daily activities to receive full credit for the class If you attend, are on time, each day, and participate as scheduled, you’ll receive the full 5 points for that day. **Unexcused absences, late arrivals, and lackadaisical performance** which result in daily point reductions could significantly affect the grade.
2. **Pre-Existing Conditions** – *Students with injuries / pre-existing conditions that may affect performance must inform the instructor.*
3. Absences are only excused with a doctor’s note submitted immediately upon return to class or scanned and emailed to the instructor. *Doctor’s notes only excuse class participation and do not excuse work out logs, assignments, or quizzes. Quizzes and assignments are submitted to Blackboard and given in advance.*

Class Information

1. Students with injuries or pre-existing conditions that may affect performance must inform the instructor.
2. Most of the communication will be through GMU e-mail.
3. This class is based on the Surgeon General’s recommendation: As described by the Physical Activity Guidelines for Americans, adults should engage in at least 150 minutes of moderate-intensity activity each week

Grading Scale

A = 90 – 100	B+ = 88 – 89.9	B = 84 – 87.9	B- = 80 – 83.9
C+ = 78 – 79.9	C- = 70 – 73.9	D = 60 – 69.9	F = 0 – 59.9

Professional Dispositions

See <https://cehd.gmu.edu/students/polices-procedures/>

Class Schedule

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students

DAY	TOPIC	READINGS / ASSIGNMENT DUE
1	1st Mtg in RAC LINN GYM Bleachers Downstairs ; Syllabus and Introduction to Class; Target Heart Zone, Workout Journal –	Bring Syllabus ; Fitness Test; Begin Workout Journal
2	Chronic disease risk factors. Aerobic Activity – 3/22	Initial Fitness Eval: Due
3	Fitness plan ; Stretch, Aerobic Activity –	Target Heart Zone (THZ) Worksheet ,

DAY	TOPIC	READINGS / ASSIGNMENT DUE
		Fitness plan 1 due
4	Cardiovascular Endurance ; Stretch, Aerobic Activity – 3/29	
5	Stretch & Aerobic Activity – 4/3	
6	Wt Mgt, Nutrition , Stretch & Aerobic Activity – 4/5	Quiz 1 Due
7	Flexibility Stretch & Aerobic Activity – 4/10	
8	Weight training Stretch & Aerobic Activity – 4/12	
9	Stretch & Aerobic Activity – 4/17	
10	Stretch & Aerobic Activity – 4/19	
11	Stretch & Aerobic Activity – 4/24	Quiz 2 due
12	Stretch & Aerobic Activity – 4/26	Final Fitness Evaluation
13	Stretch & Aerobic Activity – 5/1	Workout logs due
14	RAC Linn Gymnasium Downstairs Bleachers FINAL WRITTEN EXAM & FINAL Fitness Evaluation – Sit-&-Reach, Sit-Ups, BMI & 1.5 Mi Run – 5/3	Aerobic Training Fitness Plan 2 due

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>)
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <http://ods.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursesupport.gmu.edu/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .

INITIAL FITNESS EVALUATION & GOAL (1%)
Body Mass Index, Sit-Ups, Sit-and-Reach, & 1.5 Mile Run

Name: _____

Weight: _____

Height in inches: _____

BMI (Weight x 705 divided by height in inches squared) = _____

Chronic Disease Risk _____ (see **CLASSIFICATIONS BELOW!!**)

Example: 150 Man who is 5'7.5" (67.5") Tall

$$150 \times 705 = 105750 / 67.5^2 (4556.25) = 23.2$$

1.5 Mile Run _____

Sit-ups _____ (**NOT TO BE DONE**)

Sit-&-Reach _____

YOUR ONE MAJOR GOAL FOR THIS CLASS:

FINAL FITNESS EVALUATION & GOAL (1%)
Body Mass Index, Sit-Ups, Sit-and-Reach, & 1.5 Mile Run

Name: _____

Weight: _____

Height in inches: _____

BMI (Weight x 705 divided by height in inches squared) = _____

Chronic Disease Risk: _____ (see **CLASSIFICATIONS BELOW!!**)

1.5 Mile Run _____

Sit-ups _____ (**NOT TO BE DONE**)

Sit-&-Reach _____

WAS YOUR MAJOR GOAL ACCOMPLISHED?:

BMI CLASSIFICATIONS

BMI	Chronic Disease Risk	Classification
<20.00	Moderate to Very High	Underweight
20-21.99	Low	Acceptable
22.00-24.99	Very Low	Acceptable
25.00-26.99	Low	Overweight
27.00-29.99	Moderate	Overweight
30.00-39.99	High	Obese

(**THREE-PART**, ROM NUM'S I-III) TARGET HEART ZONE (Training Intensity) WORKSHEET (3%)

NAME _____ DATE _____ COURSE _____

I. INTENSITY OF EXERCISE

1. Estimate your own maximal heart rate (MHR)

$$\text{MHR} = 208 \text{ minus } .7 (\text{age}) [\text{ex: } 208 - .7 \times 20 (= 14)] = 194$$

$$\text{MHR} = 208 - \underline{\hspace{2cm}} (.7 \times \text{age}) = \underline{\hspace{2cm}} \text{BPM}$$

2. Resting Heart Rate (RHR) = _____ BPM

3. Heart Rate Reserve (HRR) = MHR – RHR

$$\text{HRR} = \frac{\text{MHR}}{\text{MHR}} - \frac{\text{RHR}}{\text{RHR}} = \underline{\hspace{2cm}} \text{BPM}$$

4. Training Intensities (TI) = HRR x TI + RHR

$$40\% \text{ TI} = \underline{\hspace{2cm}} (\text{HRR}) \times .40 = \underline{\hspace{2cm}} + \frac{\text{RHR}}{\text{RHR}} = \underline{\hspace{2cm}} \text{BPM}$$

$$50\% \text{ TI} = \underline{\hspace{2cm}} (\text{HRR}) \times .50 = \underline{\hspace{2cm}} + \frac{\text{RHR}}{\text{RHR}} = \underline{\hspace{2cm}} \text{BPM}$$

$$60\% \text{ TI} = \underline{\hspace{2cm}} (\text{HRR}) \times .60 = \underline{\hspace{2cm}} + \frac{\text{RHR}}{\text{RHR}} = \underline{\hspace{2cm}} \text{BPM}$$

$$85\% \text{ TI} = \underline{\hspace{2cm}} (\text{HRR}) \times .85 = \underline{\hspace{2cm}} + \frac{\text{RHR}}{\text{RHR}} = \underline{\hspace{2cm}} \text{BPM}$$

5. Cardiorespiratory Training Zone (CTZ). The optimum CTZ is found between 60% and 85% training intensities. Those individuals who have been physically inactive or are in

poor or fair cardiorespiratory fitness should work between 40% and 50% TI during the first few weeks of an exercise program.

CTZ: _____ (60% TI) to _____ (85% TI)

II. MODE OF EXERCISE

Select those activities or combination of **aerobic** activities that you have enjoyed. These are activities that are **continuous, rhythmical, and with a sustained** a heart rate in a CTZ for at least 20 minutes. These would **NOT** include soccer, weight lifting, or any other “short burst” activity.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

III. BRIEFLY STATE YOUR EXPERIENCES AND FEELINGS REGARDING AEROBIC EXERCISE (MUST TYPE below.)

AEROBIC TRAINING / (HEALTH) FITNESS PLAN (4%)

GENERAL.

SMART goal. Specific, Measurable, Attainable, Realistic, Time Specific-one statement that incorporates every element of the acronym SMART. Goals that have one statement for each letter will not be graded.

FITT-Frequency, Intensity, Time, Type

During this course you will experience all the different types of cardio equipment available in the RAC. Each class will have a different objective and may include intervals, steady state training, circuit training, or other types of training.

For your final plan you may choose any form of aerobic training, but remember it should be continuous, rhythmical, and last at least 30 minutes or more. The heart rate should get up to at least 60% TI .

There will be other components to assist this plan that are not necessarily fitness oriented, but *health* related, that will improve your body's health and that can have a significant effect on your fitness. Some of those are indicated below.

The plan **MUST** be **TYPED** (handwritten assignment will receive a "0"), contain the following listed below, but may contain more information and be **DOUBLE SPACED** (if not double-spaced you can only receive 2.5 points).

(1Pt.) CURRENT STATE OF FITNESS? (Explain where you are and how long you have been there. Also **MUST INCLUDE** the fitness measurements and BMI you received the first week of class.)

(1Pts.) GOAL(S)? What goal or goals do you have that you would like to see met by the end of a particular block of time (your choice)? These may include, but not be limited to, weight loss, ability to lift more weight and/or more repetitions at lower weights, to last longer on walks, runs, and hikes; fat loss (which may occur without weight loss), stress reducing activities, etc.

(.5Pt.) LIST OF ACTIVITIES AND HOW YOU WOULD MONITOR THEM. State the kinds of aerobic training activities that are reasonable for you to do. You may also choose to do weight training as well (free weights, stationary weights, your own body as resistance, etc.). State how you would monitor these aerobic and weight training activities if you needed to do so for medical reasons, i.e. your physician wants to know about your physical activity program.

(.5Pt.) RECORD YOUR TRAINING INTENSITY (TI) AND HR. State your TI and what your most recent HR had been before, immediately after and 30 minutes after your exercise bout.

(1Pt.) OTHER? Besides aerobic training activity, you should consider other lifestyle choices that can affect your fitness level, such as diet, rest, and stress management. Please be aware that when you consider diet, this doesn't necessarily mean calorie restriction, but maybe making better choices in the food that you eat. In some cases you may eat more and lose more, especially if you choose higher fiber foods and eliminate some of the simple sugar choices such as sodas and fruit juices.

This section could include anything else that will help with your overall health, i.e. relationships with friends tend to decrease your resistance because you're staying up late and you do not "feel" like exercising.

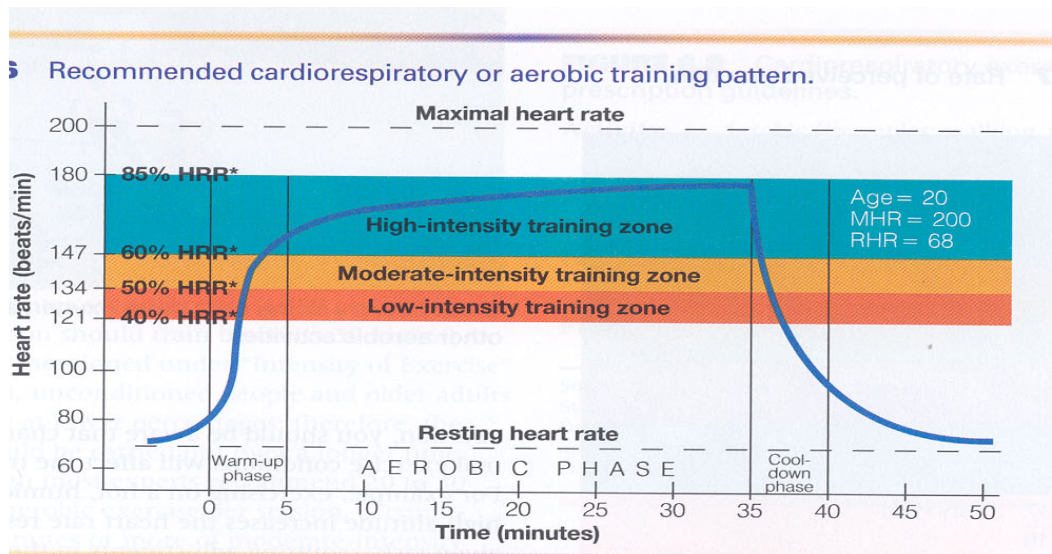
CARDIOVASCULAR TRAINING & EXERTION

The two graphs below show where you need to be to experience various training “zones” (for a 20 year-old individual) and how hard you perception is of the training you do.

Development of Aerobic Fitness

There is a *warm-up* phase in which the heart rate (HR) gradually moves into the Training Zone (TZ) for a period of 20-30 minutes. Following training, there is a *cool down* period to bring the HR back to normal.

Once you begin to work in the TZ at the moderate-to-high intensity for a period of 8-12 weeks, you should experience a reduction in your *resting HR* of 10-20 beats per minute.



Rate of Perceived Exertion (PE)

This is how you *feel* about your activity at the time you finish. There is no right or wrong, it’s basically your inner perception of the zone/task you are in with the phrases given on the scale. You then may exercise at that rate of perceived exertion.

Make sure to cross-check your actual TZ with your PE during the first weeks of your exercise program. After several weeks of this, you should be able to predict your exercise HR by your PE of exercise intensity.

FIGURE 6.7 Rate of perceived exertion (RPE) scale.



From G. Borg, "Perceived Exertion: A Note on History and Methods," *Medicine and Science in Sports and Exercise*, 5 (1983): 90-93.

AEROBIC ACTIVITY SEQUENCING OF INTENSITY*

LVL OF			BIKE	ELPTCL	TREADMILL	TIME	JOG	TIME
WEEK	DAY	INTNSY						
1	1	1	1.5 mile walk/jog	NA	NA	Whatever it takes	1.5 mile walk/jog	Whatever it takes
	2	1	50RPM – 1.5” 80 RPM – 30’ for first 20”	75 SPM 1.5” 95 SPM – 30’ for first 20”	3.0 MPH 1.5” 5.0 MPH – 30’ for first 20”	Up to 30”	Walk briskly 1.5”, jog briskly 30’; repeat for first 20”	Total – 20” + Cool Down
	Lecture 1							
2	3	2	55 RPM – 1.5” 85 RPM – 30’ for first 20”	80 SPM 1.5” 100 SPM – 30’ for first 20”	3.5 MPH 1.5” 5.5 MPH – 30’ for first 20”	30”	Walk briskly 1.5”, jog briskly 30’; repeat for first 20”	Total – 30” + Cool Down
	Lecture 2							
	4	2	65 RPM – 1.5” 90 RPM – 30’ for first 20”	85 SPM 1.5” 105 SPM – 30’ for first 20”	4 MPH 1.5” 6MPH – 30’ for first 20”	32”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	31.5” + Cool Down
	Lecture 3							
3	5	3	70 RPM – 1.5” 95 RPM – 30’ for first 20”	90 SPM 1.5” 120 SPM – 30’ for first 20”	4.1 MPH 1.5” 7.1MPH – 30’ for first 20”	34”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	34” + Cool Down
	6	3	75 RPM – 1.5” 100 RPM – 20- 30’ for first 20”	95 SPM 1.5” 125 SPM – 30’ for first 20”	4.3 MPH 1.5” 7.3MPH – 30’ for first 20”	36”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	36 + Cool Down
4	7	4	80 RPM – 1.5” 100 RPM – 30’ for first 20”	100 SPM 1.5” 130 SPM – 30’ for first 20”	4.5 MPH 1.5” 7.5MPH – 30’ for first 20”	38”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	38” + Cool Down
	8	4	80 RPM – 1.5” 100 RPM – 30’ for first 20”	100 SPM 1.5” 130 SPM – 30’ for first 20”	4.5 MPH 1.5” 7.5MPH – 30’ for first 20”	40”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	40” + Cool Down
5	9	5	80 RPM – 1.5” 105 RPM – 30’ for first 20”	100 SPM 1.5” 135 SPM – 30’ for first 20”	4.7 MPH 1.5” 7.7MPH – 30’ for first 20”	42”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	41.5” + Cool Down
	10	6	80 RPM – 1.5” 105 RPM – 30’ for first 20”	100 SPM 1.5” 135 SPM – 30’ for first 20”	5 MPH 1.5” 8 MPH – 30’ for first 20”	44”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	44” + Cool Down
6	11	7	85 RPM – 1.5” 110 RPM – 30’ for first 20”	105 SPM 1.5” 145 SPM – 30’ for first 20”	5.2 MPH 1.5” 8.2 MPH – 30’ for first 20”	45”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	45” + Cool Down
	12	7	85 RPM – 1.5” 110 RPM – 30’ for first 20”	105 SPM 1.5” 145 SPM – 30’ for first 20”	5.2 MPH 1.5” 8.2 MPH – 30’ for first 20”	45”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	45” + Cool Down
7	13	7	85 RPM – 1.5” 110 RPM – 30’ for first 20”	105 SPM 1.5” 145 SPM – 30’ for first 20”	5.2 MPH 1.5” 8.2 MPH – 30’ for first 20”	45”	Jog easy 1.5”, jog briskly 30’; repeat for first 20”	85 RPM – 1.5” 110 RPM – 30’ for first 20”
	14	7	Final Written, Sit-&-Reach & 1.5 mi run/walk	NA	NA	Whatever it takes	1.5 mile walk/jog	Whatever it takes

*This is a general pattern and may be altered depending on your level of fitness. Some of you may be able to reduce the “down” time and increase the fitness intensity and time; however, make sure to always “cool down” w/ a walk and stretch when you are done.

AEROBIC EXERCISE: We won't quit straight aerobics, (even though it appears as though I am saying this, and you're reaping greater results than before). We will finish each "Peak Burst" which will be done at the beginning of the class for 20" with straight aerobic exercise to complete the total minutes each day. Jogging, using elliptical machines, stationary or recumbent bikes, treadmills, walking fast and so-forth are all examples of aerobic exercise, which will

- 1 - increase the amount of oxygen in your blood and increase endorphins, which act as natural pain killers.**
- 2 - activate your immune system.**
- 3 - help your heart pump blood more efficiently.**
- 4 - increases your stamina over time.**

USE OF BIKES / ELLIPTICAL / TREADMILL – On the bikes set the Level to 1, complete the first RPM listed for 1.5" followed by the second RPM for 30' at a brisk pace so that breathing is hard. This will be done for the first 20"; complete the rest of the time with aerobic workout somewhere b/t low & high TI's. On the elliptical, SPM stands for Strides Per Minute. If any of these rates are too hard, make **sure** to **SEE ME ASAP**.

WALK / JOG – Walk the distance listed inside or outside followed with a jog for the time listed. You can also use the amount as time rather than distance. Walk more or less depending on your level of fitness. For the first 20" use the 1.5" / 30' time blocks – walk for 1.5", jog briskly for 20-30' so that breathing is hard, then complete the remaining time aerobically until the total time is done or use the "Jog Column" as seen above.

COOL DOWN – walk for 3" followed by a stretch of the quadriceps, hamstrings, and calf muscles as demonstrated in class.

PEAK FITNESS TRAINING

Peak Fitness Training occurs when you raise your heart rate up to your anaerobic threshold training zone for 20 to 30 seconds, and then you recover slowly for 90 seconds. The intensity is absolutely individual. For some it may be as simple as fast walking alternating with slow walking. For those in excellent condition you would run relatively fast for 30' followed by an easy jog for 1.5 minutes or if on a stationary/recumbent bike, high RPM 30' followed by moderate RPM 1.5. This is done for the first 20 minutes of an exercise bout.

Peak fitness can actually cause your growth hormone to increase naturally, without any of the expense or side effects.

How Does It Work and What is Required?

You have three different types of muscle fibers: slow, fast, and super-fast. And only ONE of these muscles will impact your production of a vital hormone called HGH, or human growth hormone, which is KEY for strength, health and longevity. High intensity burst cardio is the form of exercise that will engage these super fast fibers. They're ten times faster than slow fibers, and **this is the key to producing growth hormone!**

Are You in Somatopause (Age Related Growth Hormone Deficiency?)

As you reach age 30 and beyond, you enter what's called "somatopause," when your levels of HGH begin to drop off quite dramatically. This is part of what drives your aging process. Often nearly everyone over 30 has dramatically abnormal levels of this important hormone because they begin leading increasingly more sedentary life styles.

Children and most animals in the wild do not run marathons or lift weights, they move at high speeds for very short periods of time and then rest. This is natural and what optimizes the production of growth hormone.

The higher your levels of growth hormone, the healthier and stronger you're going to be. And the longer you can keep your body producing higher levels of HGH, the longer you will experience robust health and strength.

Dr. Harvey Cushing discovered HGH in the form of somatotropin almost a hundred years ago. Many individuals choose to inject it, though it is a banned substance in many professional sports.

As pointed out earlier, it is not recommend doing this as the health risks and cost are in no way justifiable. Ideally, you really want your body to produce it naturally, as injecting HGH does have side effects. And the way you produce it is by exercising your super-fast muscle fibers.

Benefits of Peak Fitness Exercises

Once you regularly participate in these 20 minute exercises about twice a week, most people notice the following benefits:

- **Lowers your body fat**
- **Dramatically improves muscle tone**
- **Firms your skin and reduces wrinkles**
- **Boosts your energy and sexual desire**
- **Improves athletic speed and performance**
- **Allows you to achieve your fitness goals much faster**

How to Properly Perform Peak Fitness Exercises to Increase Your Growth Hormone Levels

First of all, please remember that you can perform this with any type of exercise. While having access to a gym or exercise equipment will provide you with a larger variety of options, you don't require either. You can easily perform this by walking or running on flat ground.

You will certainly want to *work your way up to this point*, but **ultimately you want to exercise vigorously** enough so you reach your anaerobic threshold as this is where the "magic" happens that will trigger your growth hormone release.

Whatever activity you choose, by the end of your 30 second period you will NEED to reach these markers:

- **It will be relatively hard to breathe and talk because you are in oxygen debt**
- **You will start to sweat profusely. Typically this occurs in the second or third repetition unless you have a thyroid issue and don't sweat much normally.**
- **Your body temperature will rise**
- **Lactic acid increases and you will feel a muscle "burn"**

If you are using cardio equipment like an elliptical or bike, you don't need to reach any "magical" speed. It's highly individual, based on your current level of fitness; however, you know you're doing it right when you're exerting yourself to the point of typically gasping for breath after a short burst of activity.

An added boon is that you'll save a tremendous amount of time because peak fitness will cut your hour-long cardio workout down to a total of 20 minutes or so, including your recovery time, warm-up and cool down.

The actual sprinting totals only 4 minutes!

Here's what a typical peak fitness routine might look like using a recumbent bike:

1. Warm up for three minutes
2. Exercise as hard and fast as you can for 30 seconds. You should feel like you couldn't possibly go on another few seconds
3. Recover for 90 seconds
4. Repeat the high intensity exercise and recovery 7 more times

Be mindful of your current fitness level and don't overdo it when you first start out.

If you are not in great shape and just starting this you may want to start with just two or three repetitions, and work your way up to eight, which is where the magic really starts to happen. You may need to start with just walking and when you do your 30 second bursts your legs would be moving as fast as possible without running - and your arms would be pumping hard and fast.

If you can do a peak fitness workout twice a week, and follow the dietary recommendations below, you will increase your production of growth hormone.

Dietary Recommendations

- Get a good night's sleep
- Avoid a high fat meal prior to exercising
- Drink plenty of water
- Eat healthy carbs (think vegetables) and high quality protein
- Optimize your vitamin D levels
- **AVOID SUGAR**, especially fructose – this is **ABSOLUTELY crucial**.

SUGAR - If you consume sugar or fructose, especially within two hours post-exercise, you will increase somatostatin which will in turn **obliterate the production of growth hormone!**

This is yet another example of why gulping down sports drinks that are chockfull of high fructose corn syrup can do your body more harm than good, and will just shut down your body's production of HGH and negate many of the benefits from your exercise

