

WARREN COUNTY COMBINED HEALTH DISTRICT WEIGHT MANAGEMENT CLASS

APRIL 23, 2018

PHYSICAL WORK: DISTINGUISHING BETWEEN ACTIVITY AND EXERCISE!

ACTIVITY IS MOVEMENT. EXERCISE IS A SPECIAL TYPE OF MOVEMENT. EXERCISE IS ACTIVITY THAT WORKS THE BODY LONG ENOUGH AND HARD ENOUGH AND OFTEN ENOUGH TO KEEP MUSCLES TUNED TO BURN FAT EFFICIENTLY. "WHAT'S THAT?" YOU ASK..."MY MUSCLES BURN FAT?" YEP! IN FACT, OUR MUSCLES (SPECIFICALLY OUR LARGE MUSCLE GROUPS) ARE OUR OWN PERSONAL "FAT BURNERS!"

FIRST OFF, LET'S ADDRESS THE "LONG ENOUGH" PART OF THE EXERCISE EQUATION. IN ORDER TO ACTUALLY USE ANY ENERGY (A.K.A. CALORIES!) FROM OUR FAT STORES, WE MUST EXERCISE AEROBICALLY FOR A CERTAIN PERIOD OF TIME. I'VE TOLD YOU BEFORE THAT IT TAKES AT LEAST 20 MINUTES FOR A PERSON TO START BURNING FAT AS FUEL (RATHER THAN MAINLY CARBOHYDRATE), AND UP TO 30 MINUTES FOR A PERSON WHO'S IN GOOD PHYSICAL CONDITION TO DO SO. MORE ON THIS IN A BIT!

SO...HOW WILL I KNOW WHEN I'M EXERCISING HARD ENOUGH? THE ADVICE ON THIS IS TO "MAINTAIN A MODERATE PACE." BUT WHAT EXACTLY IS A MODERATE PACE???

- IT IS NOT TOO EASY...BUT NOT TOO HARD!
- IT IS NOT EFFORTLESS...IT IS NOT STRENUOUS!
- IT IS A LIVELY, ENERGETIC PACE!

IF YOU'RE NOT ALREADY EXERCISING, USE THE EXERCISE SCHEDULE (THE TWO-SIDED YELLOW SHEET) IN THE BEGINNER'S PACKET YOU RECEIVED WHEN YOU FIRST STARTED THIS CLASS. GAUGE YOURSELF AS YOU MOVE FROM NOVICE, GRADUALLY ADVANCING AS YOUR ENDURANCE INCREASES TO OR TOWARD THE GRADUATE LEVEL OF EXERCISER. SET ASIDE SOME TIME EACH DAY FOR EXERCISE. WHEN YOU CAN COMFORTABLY EXERCISE FOR THE ASSIGNED PERIOD OF TIME WITHOUT FATIGUE OR SORENESS, MOVE TO THE NEXT LEVEL. AS YOU MAY ALREADY KNOW, IT IS SOMETIMES NECESSARY TO DIVIDE YOUR EXERCISE INTO TWO SESSIONS IN ORDER TO GIVE YOURSELF SOME TIME TO PHYSICALLY RECUPERATE.

I JUST RE-READ THAT 2ND PARAGRAPH. SINCE I SPECIFIED "AEROBIC EXERCISE," I NEED TO TELL YOU THE DIFFERENCE BETWEEN AEROBIC AND ANAEROBIC EXERCISE.

AEROBIC EXERCISE REQUIRES THE PUMPING OF OXYGENATED BLOOD TO THE HEART, SO IT CAN DELIVER OXYGEN TO WORKING MUSCLES. THIS WILL STIMULATE THE HEART RATE AND THE BREATHING RATE TO INCREASE IN A WAY THAT CAN BE MAINTAINED THROUGHOUT THE EXERCISE SESSION. (IDEALLY, THAT IS!) EXAMPLES OF AEROBIC EXERCISE INCLUDE WALKING, SWIMMING, RUNNING, BIKING, HIKING, CROSS COUNTRY SKIING, AND KICK BOXING. TO AFFECT HEART RATE AND PRODUCE

BODY COMPOSITION CHANGES, THIS TYPE OF EXERCISE USING THE LARGE MUSCLE GROUPS IS ESSENTIAL. YOU'RE WORKING UP A SWEAT, YOU'RE BREATHING HARD, AND YOU CAN SUSTAIN IT FOR MORE THAN A COUPLE MINUTES WHILE YOUR HEART, LUNGS AND MUSCLES WORK OVERTIME.

ANAEROBIC EXERCISE, ON THE OTHER HAND, IS SHORT-LASTING AND HIGH-INTENSITY ACTIVITY WHERE YOUR BODY'S DEMAND FOR OXYGEN EXCEEDS THE OXYGEN SUPPLY AVAILABLE. THIS TYPE OF EXERCISE RELIES ON ENERGY SOURCES THAT ARE STORED IN THE MUSCLES AND, UNLIKE AEROBIC EXERCISE, IS NOT DEPENDENT ON OXYGEN FROM BREATHING THE AIR. WEIGHT TRAINING AND SPRINTING ARE EXAMPLES.

SO, BACK TO THE SPECIFICS OF EXERCISE: HOW OFTEN DO WE NEED TO EXERCISE?

FOR AEROBIC EXERCISE, A MINIMUM OF 3 TIMES A WEEK WILL PRODUCE RESULTS – OF COURSE, THE MORE, THE MERRIER! UNLESS YOU'RE LUCKY ENOUGH TO HAVE SOME SPARE TIME, YOU'LL HAVE TO SACRIFICE SOME ACTIVITY OF A LESSER PRIORITY TO SCHEDULE THE TIME THAT IS REQUIRED FOR YOUR EXERCISE PROGRAM. IF YOU HAVEN'T ALREADY, MAKE TIME FOR YOURSELF RIGHT NOW!

NOW LET'S CONTINUE THE DISCUSSION ON USING FAT AS FUEL – OR, HOW TO TURN YOURSELF INTO ONE LEAN, MEAN, FAT BURNING MACHINE!!! CHOOSE ONE OF THE AFOREMENTIONED EXERCISES THAT YOU LIKE (OR AT LEAST ARE ABLE TO SAFELY PERFORM *AND* CAN TOLERATE!) AND YOU'LL BE ON YOUR WAY TO “WAKING UP” YOUR FAT BURNERS! REMEMBER, THOUGH, ROME WAS NOT BUILT IN A DAY. LET'S SAY YOU BOUGHT YOURSELF A FAST, FLASHY CAR. FOR SOME UNKNOWN REASON, YOU KEPT THE OIL CHANGED AND FILLED IT WITH THE PERFECT FUEL...THEN KEPT IT IN THE GARAGE FOR TEN YEARS. THE RESPONSE YOU GOT WHEN YOU STEPPED ON THE GAS PEDAL? PITIFUL, OF COURSE!

HUMAN MUSCLE IS CERTAINLY MORE PERFECTLY DESIGNED THAN ANY AUTOMOBILE! HOWEVER, THE SAME HOLDS TRUE FOR YOUR BODY AS FOR A MACHINE...BOTH ARE DISMANTLED BY INACTIVITY. IF YOU IGNORE EXERCISE, THE FAT-BURNING MECHANISM INSIDE THE MUSCLE (CALLED THE MITOCHONDRIA) WILL DECREASE IN NUMBER, SIZE AND EFFICIENCY. THE OXYGEN NEEDED TO BURN FAT IS SLUGGISHLY TRANSPORTED FROM LUNGS TO BLOOD TO MUSCLE. THE CARBOHYDRATE NEEDED TO FLAME THE FAT-BURNING PROCESS IS POORLY STORED.

UNLIKE AN ENGINE, THOUGH, THE BODY WILL ALWAYS, EVENTUALLY, RESPOND. AEROBIC EXERCISE AWAKENS MUSCLES AS FAT BURNERS. CASUAL ACTIVITIES SUCH AS WASHING THE CAR, SWEEPING THE FLOOR, OR RUNNING ERRANDS DO NOT STRESS THE MUSCLE CORRECTLY TO RETAIN THE IDEAL FAT-BURNING ABILITIES.

EXERCISER'S MUSCLE MOVEMENT:

FUEL = **FAT** + carbohydrate

NON EXERCISER'S MUSCLE MOVEMENT:

FUEL = **CARBOHYDRATE** + fat

SO, BY BEING AN EXERCISER WE CAN ACTUALLY GET INTO OUR FAT STORES! OUR MUSCLES ARE DESIGNED TO BURN FAT AS THEIR MAJOR SOURCE OF FUEL WHEN ASKED TO WORK FOR LONG PERIODS OF TIME AT A MODERATE PACE. WHICH LEADS TO THE NEXT STATEMENT:

IT'S HOW FAR, NOT HOW FAST!

HOW FAST YOU MOVE DETERMINES HOW LONG YOU CAN EXERCISE. RAPID MUSCLE MOVEMENT IS FUELED PRIMARILY BY CARBOHYDRATE, NOT FAT. SO, INTENSE EXERCISE QUICKLY DEPLETES CARBOHYDRATE STORES, AND MUSCLES TIRE.

CRUISING AT HIGH SPEED

FUEL = **CARBOHYDRATE** + fat

CRUISING AT MODERATE SPEED

FUEL = **FAT** + carbohydrate

SO, THE KEY TO FAT LOSS IS DISTANCE, NOT SPEED! FAT BURNS IN THE FLAME OF CARBOHYDRATE. I CAN ILLUSTRATE THIS PROCESS BY COMPARING BURNING BODY FAT TO BURNING FIREPLACE LOGS:

START WITH KINDLING AND A MATCH. WITH PATIENCE AND TIME, SUFFICIENT AIR INTENSIFIES THE HEAT TO IGNITE THE LARGE LOGS. WOULD YOU LET THE FIRE DIE OUT BEFORE THE LOGS ARE ADDED? NOT IF YOU WANT HEAT!

BURNING BODY FAT: (IMAGINE) CARBOHYDRATE AS KINDLING
EXERCISE AS THE MATCH
OXYGEN AS THE AIR
FAT AS THE LOGS

AS YOU BEGIN MODERATE EXERCISE, CARBOHYDRATE IS THE PRIMARY FUEL (KINDLING). IT TAKES TIME FOR OXYGEN (AIR) TO REACH THE WORKING MUSCLES AND CREATE THE ENVIRONMENT (HEAT) TO BURN FAT. IT ALSO TAKES TIME FOR THE BODY TO TRANSPORT THE FAT OUT OF THE CELLS TO THE MUSCLES.

IF YOU KEEP EXERCISING, THE FAT (LOGS) GET IGNITED AS FUEL. ONCE THE FAT BURNING CONDITIONS ARE RIGHT, YOU SHOULD MAKE THE MOST OF A WORKOUT. KEEP THOSE MUSCLES MOVING! THE IDEAL, EVENTUAL GOAL WOULD BE FOR AN HOUR AT A TIME, 3 OR MORE TIMES A WEEK.

OF COURSE, ANY EXERCISE IS BETTER THAN NO EXERCISE! IF YOU'RE PHYSICALLY UNABLE TO EXERCISE FOR AN HOUR, DO WHAT YOU CAN! IT MAY TAKE YOU LONGER TO REACH YOUR GOAL, BUT YOU WILL REACH IT EVENTUALLY!

OUR "NO!" FOOD FOR THIS WEEK: CHIPS! (LET'S TRY IT AGAIN!!!)

SEE YOU NEXT MONDAY!