WARREN COUNTY COMBINED HEALTH DISTRICT WEIGHT MANAGEMENT CLASS

APRIL 1, 2019

THINK SLEEP!

WHO DOESN'T KNOW THE VALUE OF A GOOD NIGHT'S REST?! WHEN I CAN'T SLEEP, I'M CRABBY (-ER THAN USUAL!) AND GROGGY. NOW STUDIES HAVE SHOWN THAT LOSS OF SLEEP CAN ACTUALLY AFFECT THE BODY'S METABOLISM, MAKING IT DIFFICULT TO MAINTAIN WEIGHT LOSS...OR EVEN TO LOSE WEIGHT IN THE FIRST PLACE! SLEEP LOSS ALSO INCREASES HUNGER, AND WHO NEEDS THAT?!?

I DON'T HAVE TO TELL YOU THAT AS A NATION WE ARE GETTING HEAVIER AND HEAVIER. WE HAVE MORE FOOD READILY AVAILABLE THAN EVER BEFORE...AND OUR CHOICES ARE NOT NECESSARILY THE HEALTHIEST. COMBINE THAT WITH A MODERN LIFESTYLE, AND THERE YOU HAVE IT! WOULD YOU BELIEVE THAT 150 YEARS AGO, A "SEDENTARY LIFESTYLE" WAS ACTUALLY CONSIDERED TO BE THAT OF A FARMER'S WIFE?!

SLEEP LOSS APPEARS TO DO TWO THINGS:

- 1. IT MAKES YOU FEEL HUNGRY, EVEN IF YOU'RE FULL. FOR ONE THING, I'M SURE IT INTERFERES WITH YOUR JUDGEMENT. ANYONE CAN TELL YOU THAT WHEN THEY'RE NOT FULLY RESTED, THEY MAKE DIFFERENT DECISIONS THAN THEY WOULD WHEN THEY'RE IN THEIR BEST FRAME OF MIND. ANOTHER REASON HAS A MORE SCIENTIFIC BASIS: SLEEP LOSS HAS BEEN SHOWN TO AFFECT THE SECRETION OF CORTISOL, A HORMONE THAT REGULATES APPETITE. AS A RESULT, INDIVIDUALS WHO LOSE SLEEP MAY CONTINUE TO FEEL HUNGRY IN SPITE OF ADEQUATE FOOD INTAKE.
- 2. IT INCREASES FAT STORAGE. (OH NOOOOO!) SLEEP LOSS MAY ALSO INTERFERE WITH THE BODY'S ABILITY TO METABOLIZE CARBOHYDRATES, WHICH LEADS TO HIGH LEVELS OF BLOOD SUGAR. EXCESS BLOOD SUGAR WILL PROMOTE THE OVERPRODUCTION OF INSULIN, WHICH CAN LEAD TO THE STORAGE OF BODY FAT AND INSULIN RESISTANCE, A CRITICAL STEP INTO THE DEVELOPMENT OF DIABETES.

ARE YOU A NIGHT OWL? EVEN IF YOU MANAGE TO GET THE PROPER NUMBER OF HOURS OF SHUT-EYE, YOU'RE MORE LIKELY TO DEVELOP TYPE 2 DIABETES AND HEART DISEASE!

THESE TWO THINGS (OBESITY AND SLEEP) ARE INTRICATELY RELATED. THE EPIDEMIC OF OBESITY IS PARTICULARLY SERIOUS FOR CHILDREN. THE CDC SAYS THAT <u>1 IN 3</u> AMERICAN CHILDREN BORN IN 2000 WILL DEVELOP DIABETES, AND CHILDREN UNDER 10 YEARS OF AGE ARE ALREADY DEVELOPING TYPE 2 DIABETES, WHICH WAS, IN THE PAST, PRIMARILY SEEN IN ADULTS- AND EVEN THEN, USUALLY NOT UNTIL PAST THE AGE OF 40!

AS WE'VE DISCUSSED, UNCONTROLLED DIABETES CAN LEAD TO HYPERTENSION AND INCREASED RISK OF HEART DISEASE. IT ALSO DAMAGES THE EYES, KIDNEYS, AND OTHER VITAL ORGANS. THE EARLIER ONE DEVELOPS THE DISEASE, THE GREATER THE POTENTIAL FOR LONG-TERM DAMAGE – ESPECIALLY IF THE DIABETES ISN'T DIAGNOSED AND CONTROLLED WITH TREATMENT.

THE PROBLEM OF OBESITY IN CHILDREN IS A MAJOR CONCERN FOR ANOTHER REASON: THE INCREASED INCIDENCE OF SLEEP APNEA. 20-YEAR REVIEW OF OBESITY-ASSOCIATED DISEASES AMONG CHILDREN AGED 6 TO 17 CONDUCTED BY THE CDC FOUND A SIGNIFICANT INCREASE IN HOSPITAL DISCHARGES FOR A NUMBER OF OBESITY-RELATED MEDICAL CONDITIONS. DISCHARGES FOR SLEEP APNEA IN PARTICULAR INCREASED BY 436%! IT'S NO LESS SERIOUS FOR ADULTS: AN ESTIMATED 22 MILLION AMERICANS HAVE SLEEP APNEA, WHICH IS OFTEN ASSOCIATED WITH PEOPLE WHO ARE OVERWEIGHT. "AS THE PERSON GAINS WEIGHT. ESPECIALLY IN THE TRUNK AND NECK AREA, THE RISK SLEEP-DISORDERED BREATHING INCREASES DUE TO COMPROMISED RESPIRATORY FUNCTION." SAY MARGARET MOLINE. PHD. AND LAUREN BROCH, PHD, TWO SLEEP SPECIALISTS AT NEW YORK CORNELL MEDICAL CENTER.

SO: LACK OF SLEEP (OBVIOUSLY) = TOO TIRED TO EXERCISE AND / OR MAKE GOOD FOOD CHOICES. BOTH THESE TASKS REQUIRE ENERGY! IN OTHER WORDS, NOT ONLY DOES OBESITY CONTRIBUTE TO SLEEP PROBLEMS, BUT SLEEP PROBLEMS CAN ALSO CONTRIBUTE TO OBESITY!

I MENTIONED A GREATER LIKELIHOOD IN THE DEVELOPMENT OF DIABETES.

A 1999 STUDY BY SCIENTISTS AT THE UNIVERSITY OF CHICAGO FOUND
THAT BUILDING UP A SLEEP DEBT OVER A MATTER OF DAYS CAN IMPAIR

METABOLISM AND DISRUPT HORMONE LEVELS. AFTER RESTRICTING 11 HEALTHY YOUNG ADULTS TO FOUR HOURS SLEEP FOR SIX NIGHTS, RESEARCHERS FOUND THEIR ABILITY TO PROCESS GLUCOSE (SUGAR) IN THE BLOOD HAD DECLINED – IN SOME CASES, TO THE LEVEL OF A DIABETIC!

A FOLLOW-UP STUDY TESTED HEALTHY MEN AND WOMEN WITH AN AVERAGE BMI; HALF WERE NORMAL SLEEPERS, AND THE OTHER HALF AVERAGED 6.5 HOURS OR LESS PER NIGHT. GLUCOSE TOLERANCE TESTS SHOWED THAT THE SHORT SLEEPERS WERE EXPERIENCING HORMONAL CHANGES THAT COULD AFFECT THEIR FUTURE BODY WEIGHT AND IMPAIR THEIR LONG-TERM HEALTH. TO KEEP THEIR BLOOD SUGAR LEVELS NORMAL, THE SHORT SLEEPERS NEEDED TO MAKE 30% MORE INSULIN THAN THE NORMAL SLEEPERS. (WHAT DO YOU THINK THIS DOES TO YOUR PANCREAS?) BOTH STUDIES WERE LED BY EVE VAN CAUTER, PHD, WHO TERMED SLEEP DEPRIVATION "THE ROYAL ROUTE TO OBESITY." DESPITE NOT YET BEING OVERWEIGHT, SHE SAID, THESE YOUNG ADULTS HAD PROFILES THAT PREDISPOSED THEM TO PUTTING ON WEIGHT.

DR. VAN CAUTER'S RESEARCH SHOWS THAT THOSE OF US WHO FAIL TO SLEEP ADEQUATELY HAVE PHYSIOLOGIC ABNORMALITIES THAT MAY INCREASE APPETITE AND CALORIE INTAKE. REMEMBER DISCUSSING LEPTIN A COUPLE WEEKS AGO? ALONG WITH (GROWLIN'!) GHRELIN, THEY ARE THE HORMONES THAT REGULATE YOUR APPETITE. WHEN LEPTIN LEVELS ARE DEPRESSED, WHICH HAPPENS WHEN WE'RE SLEEP DEPRIVED, THE BRAIN SENSES STARVATION. THIS, OF COURSE, MEANS AN INCREASE IN APPETITE. BECAUSE THE PSYCHOLOGICAL MANIFESTATIONS OF FATIGUE (INVOLVING SLEEP AND HUNGER) ARE SIMILAR, AS ADULTS, WE CAN CONFUSE THEM. (KIND OF LIKE WHEN WE CONFUSE THIRST FOR HUNGER.) SO, HERE'S YET ANOTHER FUN FACT: WE SOMETIMES TEND TO EAT WHEN WE'RE ACTUALLY SLEEPY, BECAUSE FATIGUE IS A SIGN OF HUNGER. THE TWO YEAR OLDS GET IT RIGHT AGAIN!

THIS IS A LOT OF INFO. NEXT WEEK, WE'LL TALK ABOUT WHAT WE CAN DO ABOUT SLEEP DEPRIVATION.

HOW DID YOU DO WITH "NO PRETZELS?"

OUR "NO!" FOOD FOR THE WEEK: PANCAKES / WAFFLES / FRENCH TOAST

