

Dr. Nwizu's

WEIGHT LOSS GUIDEBOOK



weightclinicatfpgreeley.com

ABOUT DR. NWIZU'S WEIGHT LOSS PROGRAM

Dr. Chima Nwizu is a Diplomate of the American Board of Family Medicine and the American Board of Obesity Medicine. He offers a full spectrum of care that includes adult medicine, pediatrics, obstetrics, and in-office surgery. In addition to seeing patients at Dr. Nwizu's Weight Loss Program, he provides the full spectrum of family medicine care at Family Physicians of Greeley.

With the understanding of the crucial role obesity plays in several conditions, such as type 2 diabetes, hypertension, heart disease, elevated cholesterol, obstructive sleep apnea, arthritis, back pain and a host of other medical conditions, Dr. Nwizu obtained a board certification in obesity medicine and consequently incorporated obesity medicine into his practice. Clinical research and observational studies have shown that a 5-10% weight loss can significantly improve obesity-associated health conditions including, but not limited to, type 2 diabetes, hypertension (high blood pressure), elevated cholesterol, and heart disease.

Dr. Nwizu enjoys helping people lose weight. He understands that an individual does not just gain weight because of his or her habits. Weight gain is almost always a culmination of factors - most of which are not even known by those affected by weight. In other words, weight gain is the result of interplay of various factors in the individual's immediate environment. Sometimes predisposition to adult obesity starts in the womb, when conditions such as diabetes arise during the pregnancy (gestational diabetes), hypertensive disease of pregnancy (e.g. preeclampsia), poor maternal nutrition, excessive weight gain in pregnancy, prematurity or pre-term delivery are present during that pregnancy. Other culprits that may be responsible for a person's weight gain may include factors such as the stress that arises from the individual's job, the stress of losing one's job, stress of changing jobs or getting a new job, or of divorce, among other things. In addition, the onset of health problems that may promote weight gain include thyroid disease, depression, the vicious cycle of arthritis, sleep apnea, genetics, smoking cessation, the individual's environment and numerous medications - including prescription medications and non-prescription medications. Dr. Nwizu provides individualized treatment unique to the patient's circumstance, tailored towards addressing precipitating factors, in combination with evidenced based, scientifically proven methods and sometimes using FDA-approved weight loss medications as adjunct therapy, in order to help the individual achieve meaningful and sustainable weight loss.



The health benefits of weight loss often start when the individual begins to lose weight and often become significantly appreciable with up to 5% weight loss. Consequently, Dr. Nwizu works with the individual's other health care providers to reduce doses of medications, and in some cases get patients off medications that will no longer be needed as a result of the improvement of the person's health condition following weight loss.

Given the role pregnancy may play in contributing to obesity, Dr. Nwizu ensures that his obstetric patients gain the right amount of weight during pregnancy through nutrition counseling, in order to prevent the gain of excess weight that will be difficult to lose following pregnancy. Since childhood obesity is a strong predictor of adult obesity, he also provides appropriate weight interventions and counseling to children, adolescents and teenagers who may be affected by weight.

Finally, in his structured and comprehensive weight loss program, Dr. Nwizu continues to work with his patients even after they have attained a mutually agreed goal weight, in order to continue the challenging task of weight loss maintenance to prevent weight regain and weight recycling.

TOP FACTORS PREDISPOSING TO OVERWEIGHT AND OBESITY



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TOP FACTORS RESPONSIBLE FOR WEIGHT GAIN

› Excess calorie intake

› Stress

May be from losing a job, change in job, bereavement, divorce, separation from a loved one, other forms of stress.

› Genetics

Presence of obesity in the family

› Epigenetics

Alteration in gene expression without alteration in genetic code

Factors present in utero (during the time a baby is in the womb) such as gestational diabetes, preeclampsia, under nutrition or over nutrition in pregnancy, preterm/premature delivery, may predispose to ultimate development of overweight and obesity in adulthood

› Nutrition

Availability and over consumption of cheap, energy dense, palatable nutrition

› Sedentary lifestyle

› Environment

Time is preferentially devoted to activities associated with

minimal energy expenditure such as increase in screen time

Twenty five percent of those who watched TV up to 20 hours per week are obese; and 11-14% of those who watched TV <5 hours per week are obese

There is increased prevalence of obesity in those who use computer for greater than 10 hours per week

› Technology

Increased use of vehicles as means of movement; people will preferentially drive to a grocery store 1-2 blocks away than walk or bike

People will use elevators/escalators rather than walk up and down stairs

People can shop on computers, tablets, and smart phones and have items delivered to their doorsteps rather than walk the aisles of shops to pick out commodities they want to purchase

› Television

With the help of remote controls one can change channels, turn up volume or turn down the volume or turn on and turn off the television set, from the comfort of a chair rather than walking up to the television set to perform these activities

DEFYING THE ODDS: SMALL ADJUSTMENTS THAT CAN HELP AVOID WEIGHT GAIN

› Go shopping in store rather than online shopping

› Use the buttons on your TV rather than the remote control

› Decrease screen time

› Take the stairs rather than the elevators/escalators

› Walk a block or 2 (or even more) rather than driving

› Take frequent breaks from inactivity, whether at your job or any other place

› Get up and walk at preselected intervals of times rather than prolonged sitting

› Fidgeting can result in expenditure of 200 additional calories over a 24-hour period

› Engage in at least 30 minutes of brisk walking 5 days a week (over your daily routine activities at your job)

› Take carry-on-bags when traveling to get in extra resistance training, rather than taking luggage with rollers

MEDICAL CONDITIONS ASSOCIATED WITH OBESITY

Clinical research and observational studies have shown that a 5-10% weight loss can significantly improve obesity-associated health conditions, which may include the following.



> Insulin resistance

- Prediabetes
- Diabetes mellitus type 2

> Metabolic syndrome

- Atherosclerosis
- Hyperlipidemia (hypercholesterolemia)
- Hypertension (high blood pressure)
- Acanthosis nigrans

> Kidney disease

- Glomerulopathy

> Kidney stones

> Gall stones (cholelithiasis)

For every 1 unit increase in BMI is 7% increased risk of gall stones

> Increased risk of blood clots

> Asthma (made worse by obesity)

> Stroke

For every 1 unit increase in BMI there is 4% increase in ischemic stroke and 6% increase in hemorrhagic stroke

> New onset of atrial fibrillation

For every 1 unit increase in BMI there is 4% increase risk of atrial fibrillation

> Non-alcoholic fatty liver disease (NAFLD)

- Hepatic steatosis
- Non-alcoholic steatohepatitis (NASH) that may lead to liver failure

NAFLD is present in up to 57-74% of those with BMI >30 and up to 90% in those with BMI of 40 or more

> Obstructive sleep apnea (OSA)

Present in 30% of those with BMI greater than 30 and 98% among those with BMI greater than 40

Increased risk of sleep apnea when neck circumference is

greater than 17 in. men and greater than 16 in. women

Sleep apnea is a condition associated with abnormal breathing during sleep, repeated awaking, fragmentation of sleep, low oxygen concentration in the blood, resulting in impairment of cognitive function, daytime somnolence (or sleepiness)

Medical conditions associated with sleep apnea may include cardiac arrhythmias (irregular heart beat), elevated pressure in the lungs (pulmonary hypertension), stroke, enlargement of the right side of the heart

› **Dementia (Alzheimer's dementia)**

Increased risk in women by age 70 years

› **Gestational diabetes (diabetes diagnosed for the first time after 20 weeks of pregnancy)**

› **Preeclampsia (hypertensive disease of pregnancy)**

› **Diminished sex drive**

› **Diminished libido**

› **Erectile dysfunction**

› **Infertility**

› **Low sperm count**

› **Infrequent or absence of ovulation**

› **Polycystic ovarian disease associated with increased acne and abnormal hair distribution**

› **Mood, anxiety and personality disorders**

There is a 1.5-2 fold increased risk of depression among those with BMI >30

Low self esteem

Dissatisfaction with body image

› **Shortness of breath**

› **Conditions associated with nerve compression**

• Carpal tunnel syndrome

• Meralgia paresthetica

› **Osteoarthritis**

• Mostly of hips and knees

› **Low back pain**

› **Balance (gait) problems**

› **Reflux disease**

› **Urinary incontinence**

› **Hernias**

› **Venous stasis ulcer**

› **Skin tags**

› **Cancer**

• Obesity is associated with colon cancer, post-menopausal (after menopause) breast cancer, ovarian cancer, pancreatic cancer, brain cancer, multiple myeloma, non-Hodgkin's lymphoma

There is increased risk of cancers of the kidney, thyroid, gallbladder, uterus and leukemia for every 5 units increase in BMI

There is decreased risk of post-menopausal breast cancer with underweight

› **Cancers associated with thinness (underweight)**

• Lung cancer, oral (mouth) cancer, stomach cancer, esophageal cancer

DISEASES MADE WORSE WITH WEIGHT LOSS

› **Congestive heart failure**

May be made worse with weight loss (obesity paradox)

› **Kidney failure on hemodialysis**

May be worse with weight loss (obesity paradox)

› **Suicide rate is 5x higher after gastric bypass surgery**

BENEFITS OF WEIGHT LOSS



THE EFFECTS OF MODERATE WEIGHT LOSS ON CARDIO METABOLIC RISK FACTORS INCLUDE THE FOLLOWING:

- › 3-5% weight loss will result in improvement of triglycerides, blood glucose levels, insulin resistance
- › 5-10% weight loss will result in improvement in systolic and diastolic blood pressures, blood glucose levels, increase in HDL-cholesterol, improvement in triglycerides and total cholesterol

GREATER THAN 10% WEIGHT LOSS WILL IMPROVE THE FOLLOWING:

- › Risk of stroke
- › Sleep apnea
- › Low back pain
- › Arthritis
 - Osteoarthritis
 - Rheumatoid arthritis
 - Gout
- › Carpal tunnel syndrome
- › Risk of blood clot
- › Heart disease
- › Complications following surgery
- › Daytime sleepiness
- › Fatigue
- › Kidney disease
- › Infertility
- › Sexual dysfunction
- › Liver disease
 - Non-alcoholic fatty liver disease (NAFLD)
 - Non-alcoholic steatohepatitis (NASH)
 - Hepatic steatosis
- › Urinary incontinence
- › Polycystic ovarian disease
- › Certain pregnancy complications such as:
 - Gestational diabetes
 - Preeclampsia
 - Large babies associated with significant birth trauma
 - Infection complications following a cesarean section
- › Self-confidence
- › Mood problems

BENEFITS OF PHYSICAL ACTIVITY



The effects of a combination of dynamic and resistance exercise include the following benefits:

› **Intense dynamic (aerobic) physical activity**

- Increases HDL-cholesterol
- Reduces triglycerides

› **Resistance exercise**

- Increases muscle mass (fat free mass)
- Improves insulin resistance
- Improves muscle strength
- Improves resting energy expenditure

Resistance training also causes mobilization of fat in adipose tissue of the abdominal viscera (helps shrink the stubborn belly fat) and subcutaneous fat (fat under the skin).

DID YOU KNOW?

- › **A 10 lbs. increase in muscle mass will result in 60k Cal/day increase in resting energy**
- › **A loss of 10 lbs. of fat will lead to a decrease in 20k Cal/day of resting energy**

MYTH: “Every pound of muscle gained burns an additional 50 calories per day.”

FACT: The truth is that each pound of muscle gained is equivalent to an extra 6 calories/day of energy expenditure, therefore when 10 lbs. of muscle replaces 10 lbs. of fat, a net 40k Cal/day increase in resting energy expenditure is achieved.

- › The energy expenditure required to burn 10 lbs. of additional muscle mass through resistance exercise is similar to energy expended during intense aerobic exercise.
- › Sore muscles may result following resistance exercise. Sore joints may be a result of poor technique, in which case, consultation with a certified exercise trainer for assistance with correct exercise technique may be necessary.

WHAT IS AEROBIC EXERCISE?

- › Physical activity is defined as any movement produced by selected muscle resulting in some expenditure of energy.
- › Exercise is a planned, structured, repetitive activity that has a beginning and an end and that is aimed at improving and or maintaining physical fitness. It is a form physical activity.
- › Any physical activity is always better than no physical activity.
- › To promote modest weight loss or prevent weight regain one needs at least 150 minutes of moderate exercise per week or 75 minutes of intense exercise per week.

WHAT ARE THE CARDIO METABOLIC BENEFITS OF EXERCISE?

- › A decrease in triglycerides is the most common beneficial lipid effect of increased physical exercise.
- › Substantial increase in HDL-cholesterol most likely noted with high intensity exercise.
- › LDL-cholesterol is not affected by exercise, however, significant weight loss by means of diet and exercise can lower the LDL-cholesterol levels and non HDL-cholesterol levels.
- › Increased physical exercise also leads to improved insulin sensitivity.

DIETARY INTERVENTIONS



The goal of dietary interventions is to reduce caloric intake:

- › Low calorie diet defined as consumption of 800-1500k Cal/day.
- › Very low calorie diet defined as consumption of <800k Cal/day.

LOW CARBOHYDRATE DIET

- › 50 grams or less to 150 grams of carbs per day
- › May result in more weight loss during the first 6 months compared to low fat diet
- › No difference in overall weight loss between low carbohydrate and low fat after 6 months



Benefits of Low Carbohydrate Diet

These benefits may occur with or without weight loss:

- › Increase in HDL-cholesterol (good cholesterol)
- › Decrease in triglycerides
- › No effect or slight increase in LDL-cholesterol (bad cholesterol)
- › Decrease in fasting blood glucose levels
- › Decrease in fasting insulin levels
- › May result in improvement in blood pressure (hypertension)
- › Will result in ketosis which may:
 - Reduce seizures in patients with epilepsy or seizure disorder
 - Improve some complications of diabetes (such as kidney function)

Risks of Low Carbohydrate Diet

- › May result in increased cravings

LOW FAT DIET

- › 20-30% of total calories from fat
- › Similar weight loss with low carb diet after 6 months



Benefits of Low Fat Diet

- › May decrease blood pressure
- › May decrease LDL-cholesterol (bad cholesterol)

Risks of Low Fat Diet

- › May cause a slight decrease in HDL-cholesterol (good cholesterol)
- › May lead to over consumption of carbohydrates, resulting in elevated blood sugar, elevated blood insulin, elevated triglycerides

VERY LOW CALORIE DIET (VLCD)

- › 400-800 total kcal/day.
- › Next most effective way of losing weight after surgical weight loss

Benefits of VLCD

- › May increase HDL-cholesterol (good cholesterol)
- › Effectively reduces triglyceride levels

- › May reduce LDL-cholesterol (bad cholesterol)
- › Results in reduction of fasting glucose levels (thereby resulting in improvement in diabetic control)
- › Results in improvement in glycosylated hemoglobin (HgA1C)
- › Reduction in fasting insulin levels

Risks of Very Low Calorie Diet (VLCD)

- › Fatigue
- › Hair loss
- › Diarrhea
- › Brittle nails
- › Gall stones
- › Kidney stones
- › Intolerance to cold
- › Gout
- › Dysmenorrhea
- › Decreased intake of minerals and vitamins resulting in:
 - Dental carries
 - Muscle cramps
 - Palpitations
 - Increased risk of osteoporosis

If you are suffering from weight problems and are not meeting weight loss goals on your own, the first step is scheduling an evaluation with Dr. Nwizu. Dr. Nwizu has more than 20 years of experience in his field, and is a trusted healthcare provider.

Call us today at (970) 378-8000 to schedule an appointment now.