

OBESITY: THE GROWING EPIDEMIC



WHAT IS OBESITY?

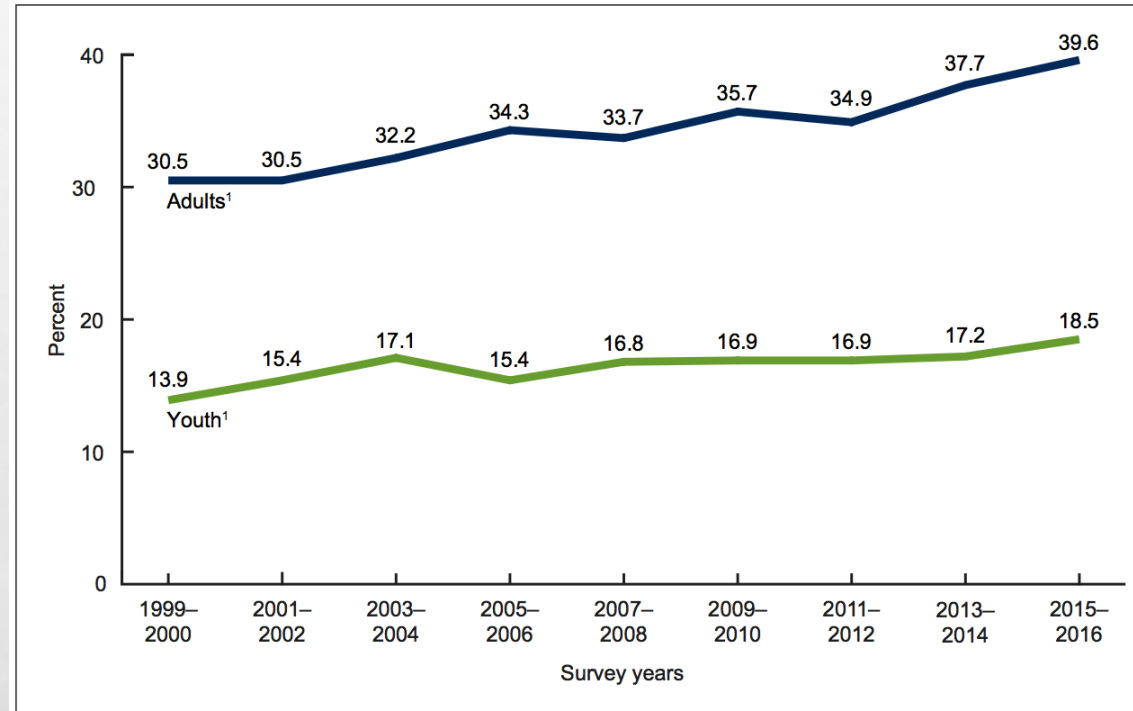
- **MEDICAL CONDITION WHEN A PERSON CARRIES EXCESS WIEGHT OR BODY FAT**
- **ANYONE WITH A BMI OF 30 OR GREATER**

OBESITY GROWTH

- **NEARLY TRIPLED WORLDWIDE IN 40 YEARS**
- **650 MILLION ADULTS WERE REPORTED OBESE IN 2016**
- **13% OF THE WORLD'S ADULT POPULATION IS OBESE**
- **41 MILLION CHILDREN REPORTED OVERWEIGHT OR OBESE IN 2016**
- **340 CHILDREN AND ADOLESCENTS AGED 5-19 REPORTED IN 2016**

OBESITY GROWTH

Figure 5. Trends in obesity prevalence among adults aged 20 and over (age adjusted) and youth aged 2–19 years: United States, 1999–2000 through 2015–2016



¹Significant increasing linear trend from 1999–2000 through 2015–2016.

NOTES: All estimates for adults are age adjusted by the direct method to the 2000 U.S. census population using the age groups 20–39, 40–59, and 60 and over. Access data table for Figure 5 at: https://www.cdc.gov/nchs/data/databriefs/db288_table.pdf#5.

SOURCE: NCHS, National Health and Nutrition Examination Survey, 1999–2016.

CANCERS RELATED TO OBESITY

- **OBESITY LEADS TO A HIGHER RISK IN DEVELOPING CANCER**
- **CLEARLY LINKED TO CANCERS OF BREAST, COLON AND RECTUM, ENDOMETRIUM, ESOPHAGUS, KIDNEY, AND PANCREAS**
- **RESEARCH SHOWS THAT IT MAY CONTRIBUTE TO CANCERS OF GALLBLADDER, LIVER, CERVIX, OVARY, NON-HODGKIN'S LYMPHOMA, MULTIPLE MYELOMA, PROSTATE**
- **RESPONSIBLE FOR 8% OF CANCERS IN US**
- **RESPONSIBLE FOR 7% OF ALL CANCER DEATHS**

CARDIOVASCULAR DISEASE RELATED TO OBESITY

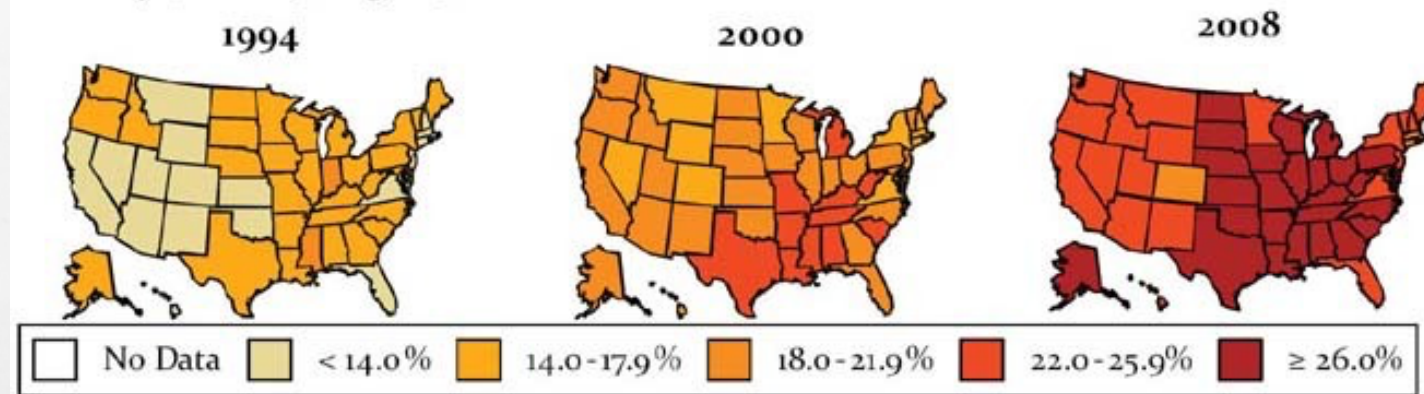
- **CVD GENERALLY REFERS TO CONDITIONS THAT INVOLVE NARROWED OR BLOCKED BLOOD VESSELS THAT CAN LEAD TO A HEART ATTACK, CHEST PAIN, OR STROKE**
- **OBESITY IS AN INDEPENDENT RISK FACTOR FOR CVD**
- **INCREASES BLOOD PRESSURE**
- **CAUSES ENLARGED LEFT VENTRICLE**
- **BUILDS EXCESSIVE FLUID AROUND THE HEART AND DECREASES BLOOD FLOW THROUGH ADIPOSE TISSUE**
- **ASSOCIATED WITH NUMEROUS CARDIAC COMPLICATIONS SUCH AS CORONARY HEART DISEASE, HEART FAILURE, AND SUDDEN DEATH**
- **CVD IS THE LEADING CAUSE OF DEATH IN WOMEN**

DIABETES MELLITUS RELATED TO OBESITY

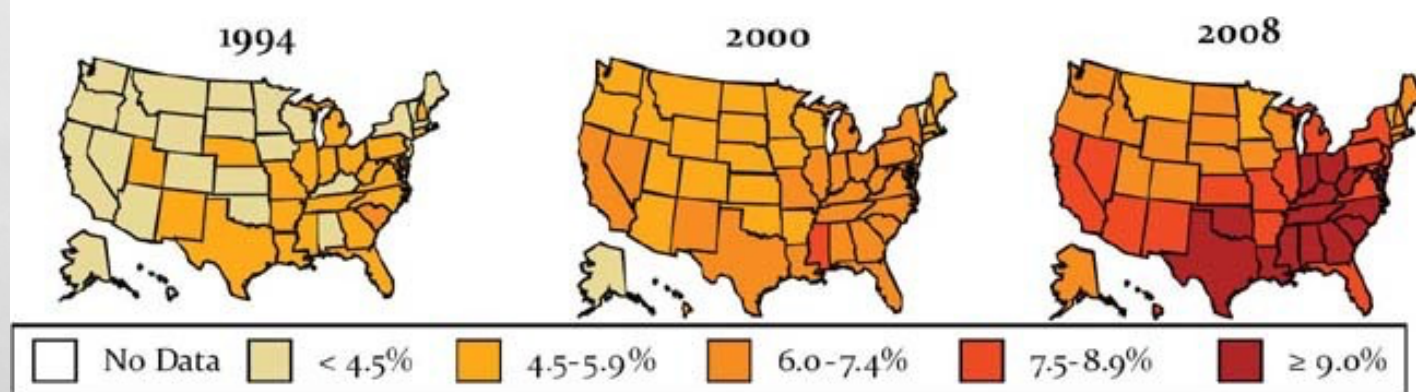
- **DM IS THE BODY'S ABILITY TO PRODUCE OR RESPOND TO THE HORMONE INSULIN IS IMPAIRED, RESULTING IN ABNORMAL METABOLISM OF CARBOHYDRATES AND ELEVATED LEVELS OF GLUCOSE IN THE BLOOD AND URINE**
- **OBESITY IS THE LEADING RISK FACTOR FOR DM**
- **WOMEN WITH A BMI OF 30 HAVE A 28 TIMES HIGHER RISK OF DEVELOPING DM**
- **BMI GREATER THAN 35 LEADS TO A 93% HIGHER**
- **DM LEADS TO OTHER HEALTH RELATED ISSUES**

DIABETES MELLITUS RELATED TO OBESITY

Obesity (BMI = 30 kg/m²)



Diabetes



SLEEP APNEA RELATED TO OBESITY

- **SLEEP APNEA IS WHEN BREATHING STOPS FOR 10 SECONDS OR MORE DURING SLEEP**
- **MOST COMMON CAUSE OF OBSTRUCTIVE SLEEP APNEA IN ADULTS IS CAUSED BY OBESITY**
- **CARRYING EXTRA WEIGHT LEADS TO BREATHING PROBLEMS DURING SLEEP**
- **UNTREATED SLEEP APNEA CAN LEAD TO HIGH BLOOD PRESSURE, TYPE 2 DIABETES, AND HEART TROUBLE**

PREGNANCY RELATED TO OBESITY

- **OBESITY MAY CAUSE FERTILIZATION TO BE UNSUCCESSFUL**
- **HIGHER RISK FOR A MISCARRIAGE**
- **MANY ARE UNABLE TO DELIVER VAGINALLY THEREFORE LEADING TO A C-SECTION AND OBESE WOMEN ARE AT HIGHER RISK FOR WOUND INFECTION**
- **HIGHER RISK FOR DEVELOPING GESTATIONAL DIABETES**
- **HIGHER RISK FOR PREECLAMPSIA**

PREGNANCY RELATED TO OBESITY

Obesity and Pregnancy

*miscarriage, foetal
abnormality, prematurity,
macrosomia, dystocia, birth
injury, still birth, neonatal
death, pregnancy-induced
hypertension, gestational
diabetes, thrombosis,
difficulty in delivery leading
to higher caesarean rates,
anaesthetic complications,
infection, post-partum
haemorrhage, maternal
mortality.*



PREVENTION OF OBESITY

- **EAT HEALTHY (FRUIT, VEGETABLES, NUTS, WHOLE GRAINS)**
- **EXERCISE FOR AT LEAST 30 MINUTES A DAY**
- **CUT DOWN FATTY AND SUGARY FOODS**
- **USE VEGETABLE-BASED OILS INSTEAD OF ANIMAL-BASED OILS**
- **PUBLIC POLICIES TO PREVENT ACCESS TO HEALTHY, LOW-FAT, HIGH-FIBER FOODS**
- **TRAIN HEALTHCARE PROFESSIONALS CORRECTLY TO LEAD AND DIRECT PEOPLE HOW TO LOSE WEIGHT**

SOURCES THAT MAY RELATE TO OBESITY

- **GENETICS**
- **OVEREATING**
- **DIET HIGH IN CARBOHYDRATES**
- **FREQUENCY OF EATING**
- **PHYSICAL INACTIVITY**
- **MEDICATIONS**
- **PSYCHOLOGICAL FACTORS SUCH AS DEPRESSION**

DISEASES THAT MAY CONTRIBUTE TO OBESITY

- **HYPOTHYROIDISM**
- **INSULIN RESISTANCE**
- **POLYCYSTIC OVARY SYNDROME**
- **CUSHING'S SYNDROME**

REFERENCES

- **BARNES, A. S. (2011). THE EPIDEMIC OF OBESITY AND DIABETES: TRENDS AND TREATMENTS. RETRIEVED FROM [HTTPS://WWW.NCBI.NLM.NIH.GOV/PMC/ARTICLES/PMC3066828/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3066828/)**
- **HOW TO AVOID THE OBESITY EPIDEMIC. (2009, MAY 20). RETRIEVED JUNE 21, 2019, FROM [HTTPS://WWW.EVERYDAYHEALTH.COM/HEALTHY-LIVING/OBESITY-PREVENTION.ASPX](https://www.everydayhealth.com/healthy-living/obesity-prevention.aspx)**
- **HOW WEIGHT AFFECTS SLEEP APNEA AND VICE VERSA. (N.D.). RETRIEVED JUNE 20, 2019, FROM [HTTPS://WWW.SLEEPFOUNDATION.ORG/ARTICLES/CONNECTION-BETWEEN-WEIGHT-AND-SLEEP-APNEA](https://www.sleepfoundation.org/articles/connection-between-weight-and-sleep-apnea)**
- **OBESITY & PREGNANCY - WHY WEIGHT LOSS CAN DO WONDERS! (N.D.). RETRIEVED JUNE 21, 2019, FROM [HTTPS://KONECTHEALTH.COM/DOCTOR/ARTICLES/OBESITY-INFERTILITY](https://konecthealth.com/doctor/articles/obesity-infertility)**
- **OBESITY AND CARDIOVASCULAR DISEASE: PATHOPHYSIOLOGY, EVALUATION, AND EFFECT OF WEIGHT LOSS. (2006, FEBRUARY 14). RETRIEVED JUNE 10, 2019, FROM [HTTPS://WWW.AHAJOURNALS.ORG/DOI/10.1161/CIRCULATIONAHA.106.171016](https://www.ahajournals.org/doi/10.1161/CIRCULATIONAHA.106.171016)**
- **OBESITY AND OVERWEIGHT. (2018, FEBRUARY 16). RETRIEVED JUNE 5, 2019, FROM [HTTPS://WWW.WHO.INT/NEWS-ROOM/FACT-SHEETS/DETAIL/OBESITY-AND-OVERWEIGHT](https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight)**
- **OBESITY RATES CONTINUE TO RISE AMONG ADULTS IN THE US. (2018, APRIL 6). RETRIEVED JUNE 6, 2019, FROM [HTTPS://WWW.CANCER.ORG/LATEST-NEWS/OBESITY-RATES-CONTINUE-TO-RISE-AMONG-ADULTS-IN-THE-US.HTML](https://www.cancer.org/latest-news/obesity-rates-continue-to-rise-among-adults-in-the-us.html)**
- **PREGNANCY AND OBESITY: KNOW THE RISKS. (2018, MAY 18). RETRIEVED JUNE 19, 2019, FROM [HTTPS://WWW.MAYOCLINIC.ORG/HEALTHY-LIFESTYLE/PREGNANCY-WEEK-BY-WEEK/IN-DEPTH/PREGNANCY-AND-OBESITY/ART-20044409](https://www.mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/in-depth/pregnancy-and-obesity/art-20044409)**
- **WOMEN'S HEALTH CARE PHYSICIANS. (2016, APRIL). RETRIEVED JUNE 20, 2019, FROM [HTTPS://WWW.ACOG.ORG/PATIENTS/FAQS/OBESITY-AND-PREGNANCY?ISMObILESET=FALSE#OBESITY](https://www.acog.org/patients/faqs/obesity-and-pregnancy?ismobileset=false#obesity)**