

SpecialtyHealth



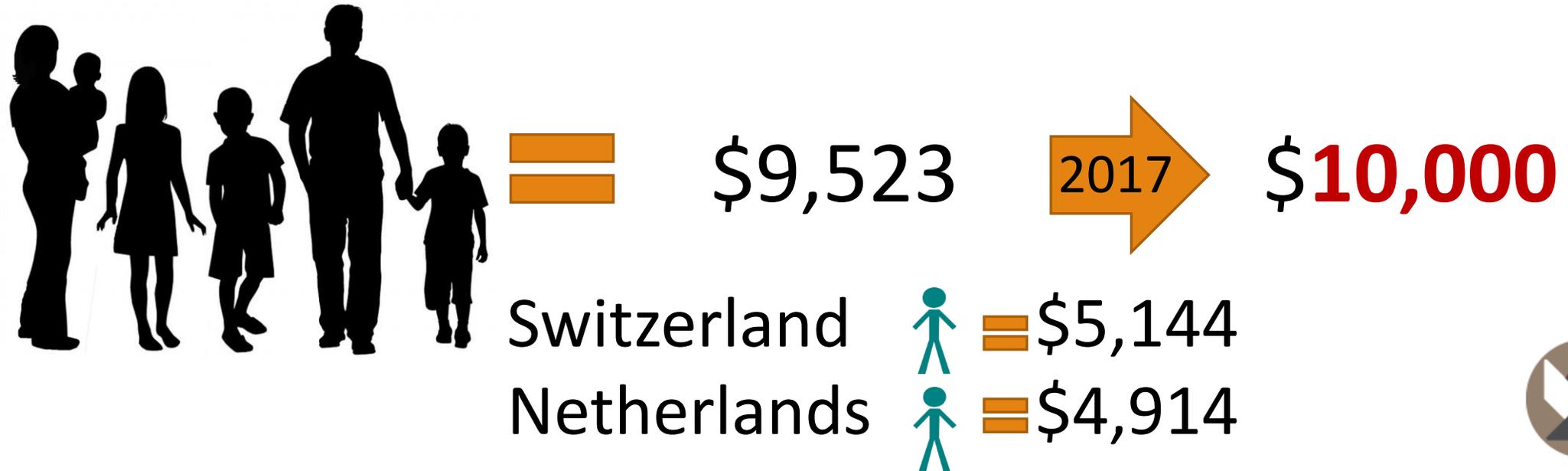
OBESITY IN THE WORKPLACE



HEALTH CARE U.S.A.



Why Does the U.S. Spend More / Person Annually on Healthcare Than Any Other Nation?



U.S. POPULATION 321 MILLION



Healthcare Cost In America

Preventable Illness Makes Up 90%
of the Healthcare Cost in the U.S.



“Budget busting U.S. Obesity Cost Climb Past the \$300 Billion!”

New Lifetime Estimate of Obesity Costs: \$92,235 Per Person



In Additional Healthcare Cost



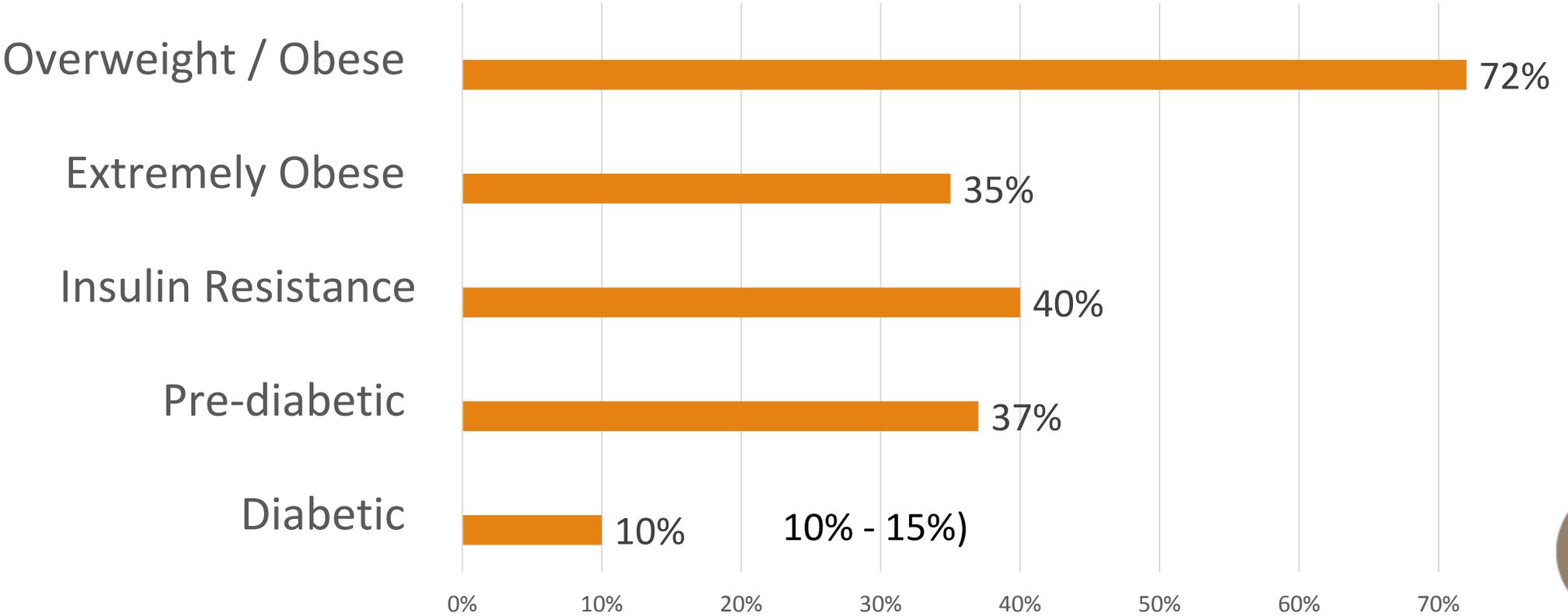
The Problem Affecting 72% of our Population !

The Whole Is Greater Than The Sum of Its Parts!

Obesity In the America is NOT
caused by Gluttony; Lack of
Willpower, or a Bad Childhood!



The Health of America



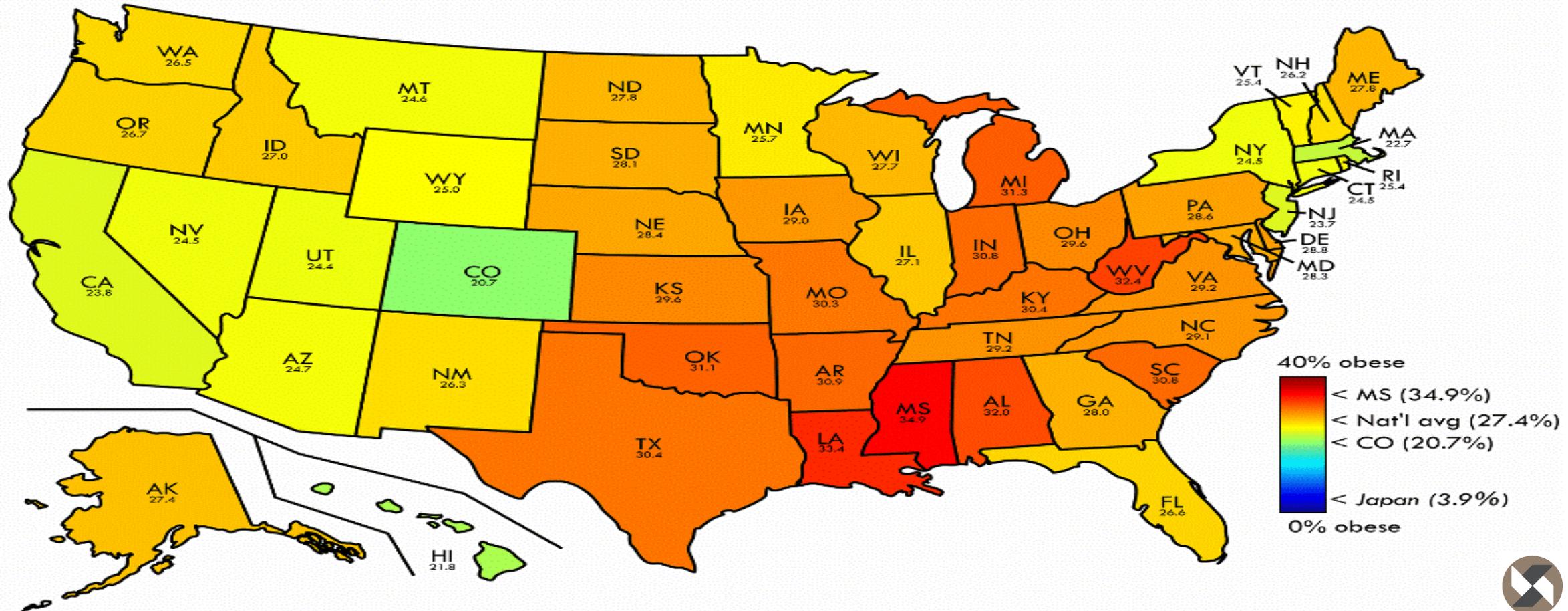


How Many Million?

DESCRIPTION	POPULATION
Overweight / Obese	177.4 Million Adults
Extremely Obese	86.2 Million Adults
Type 2 Diabetes (DM2)	32 Million Adults / Children
Insulin Resistance / Pre-Diabetic	128.0 Million Adults / Children
Obese Children	17.6 Million Children

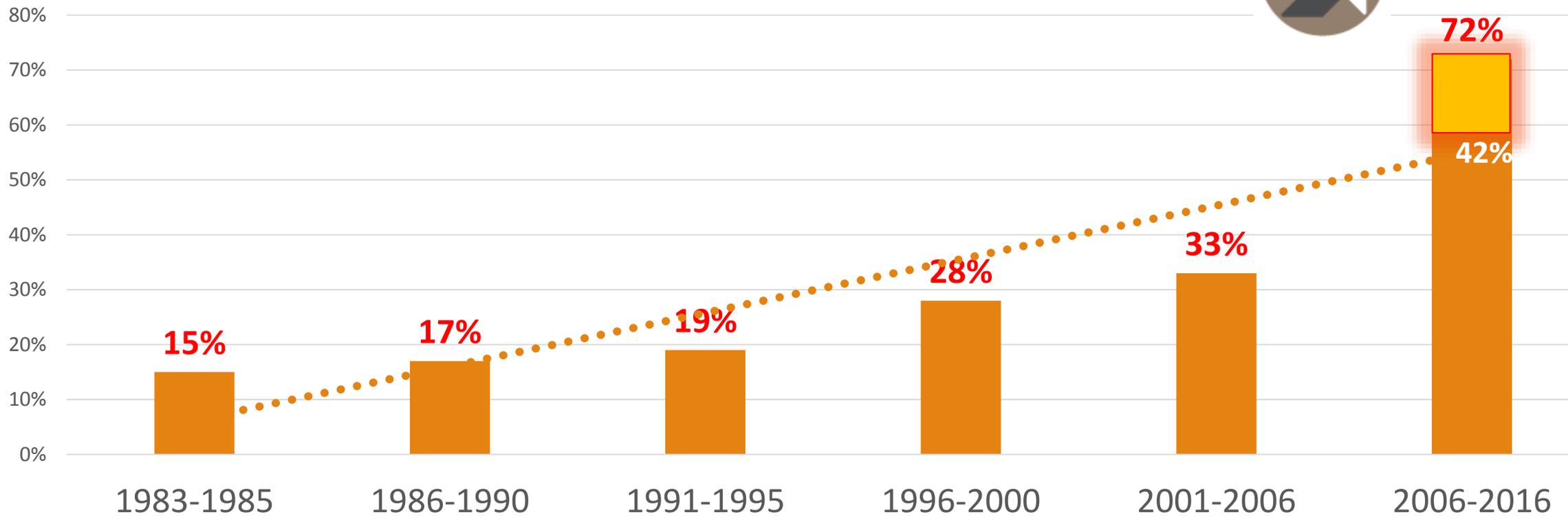


OBESITY IN U.S.



Packing on the Pounds

History of Obesity in U.S.



72% overweight / obese

Who's to Blame

High Costs & Obesity Epidemic



Food Industry

Too Much Sugar

Beverage Sugar Drinks

Big Pharma

Fast Food Industry

Government



The Food Controversy

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**“If a vegetarian diet is good for losing weight,
how come they use grain to fatten pigs and cows?”**



CAUSE & EFFECT

DM2 is at Epidemic Levels!

Pre-diabetes / Insulin Resistance Convert to

DM2 5-20 X Higher

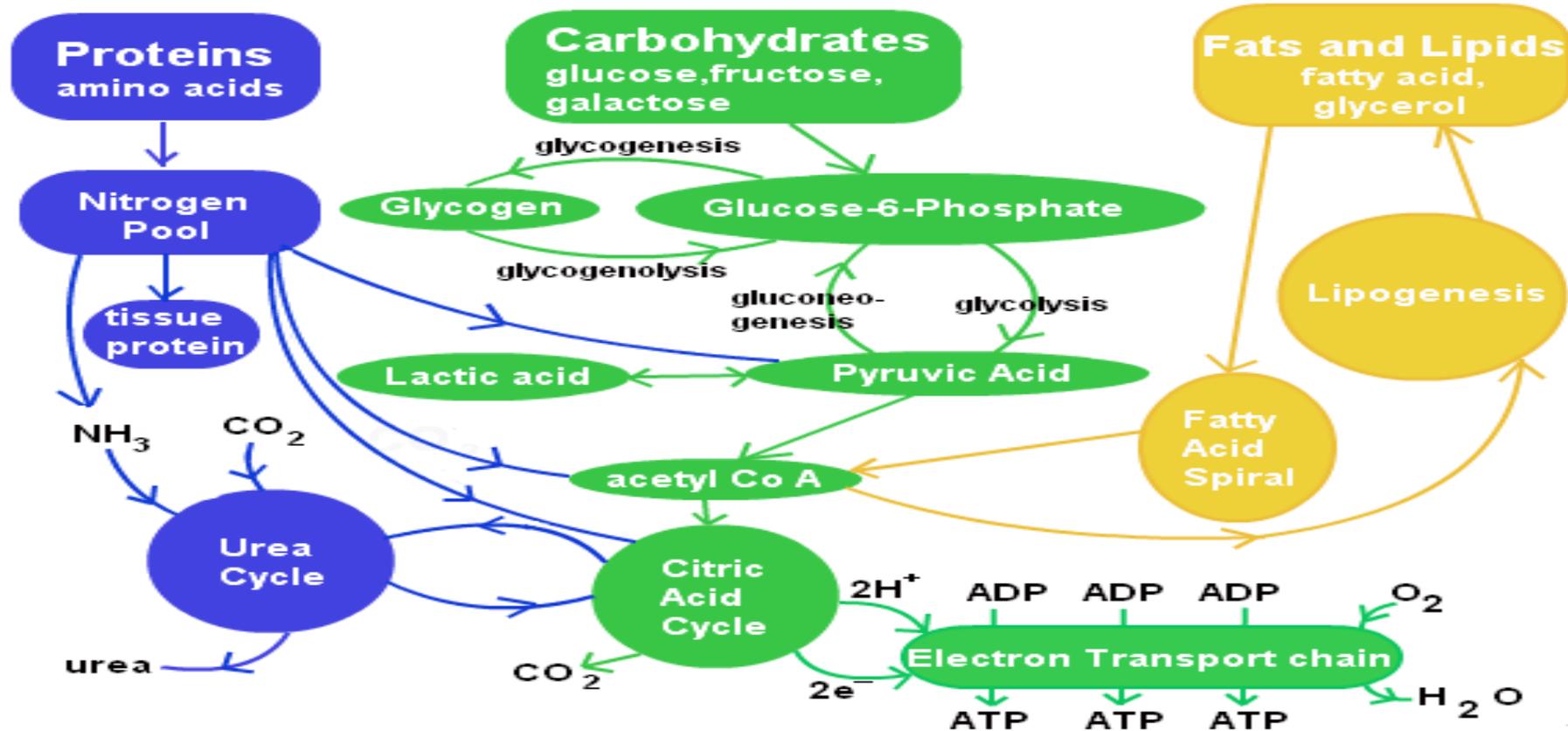
Than Those Without Insulin Resistance!

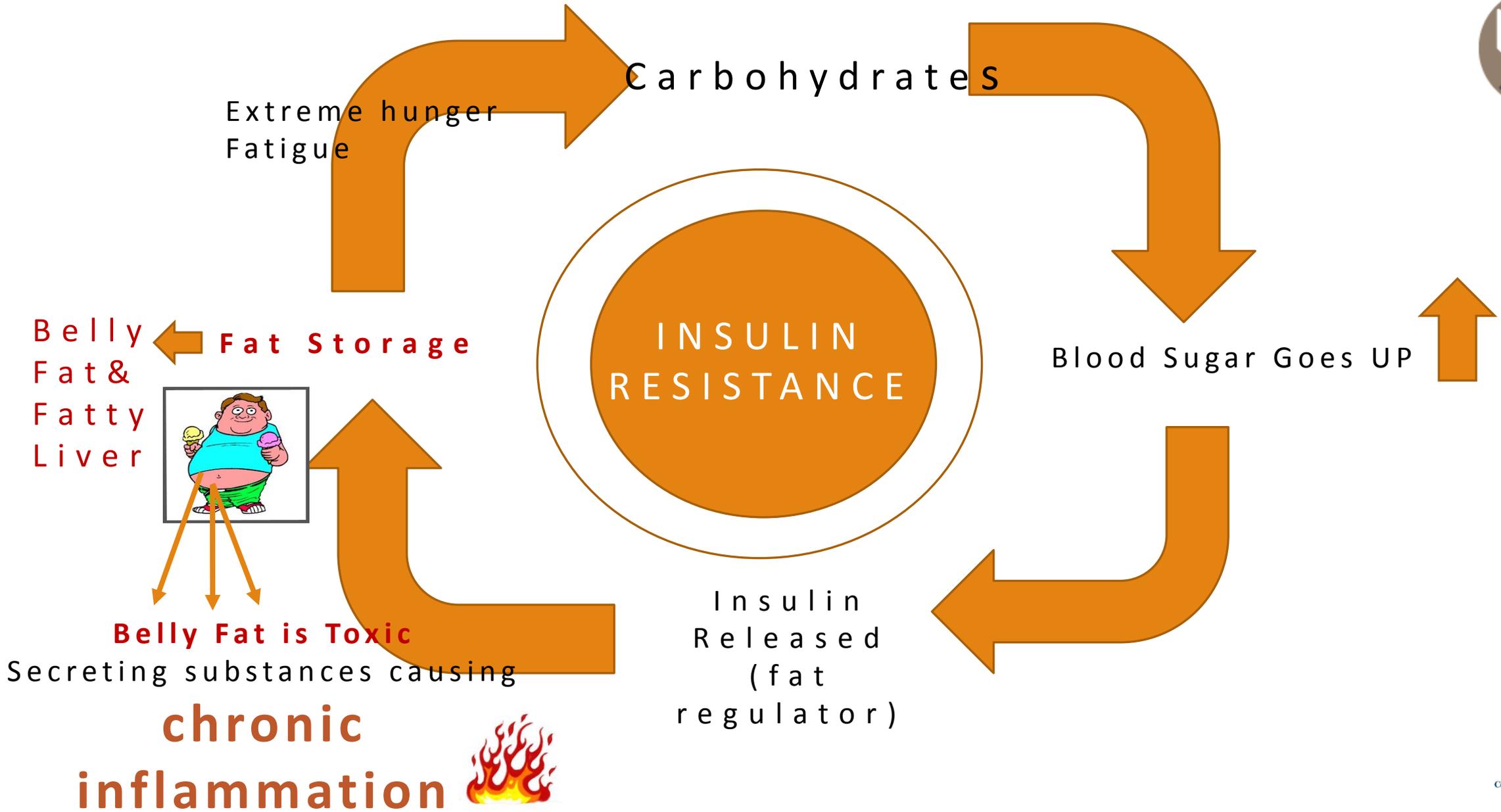


Insulin Resistance / Pre-diabetes



Metabolism Summary





Calculating % fat



Body Mass Index (BMI)

Normal < 24.9

Overweight 25 to 29.9

Obese 30 – 39.9

Ext. Obese 40 plus

Waist Measurement

High Metabolic Risk

Women 35 inches or more

Men 40 inches or more

Remember These Things!

DM1 - Too Little Insulin

DM2 - Too Much Insulin

Insulin Resistance

Chronic Inflammation

Belly Fat sends out toxic substances

Insatiable hunger

Heart Disease

High Blood Pressure

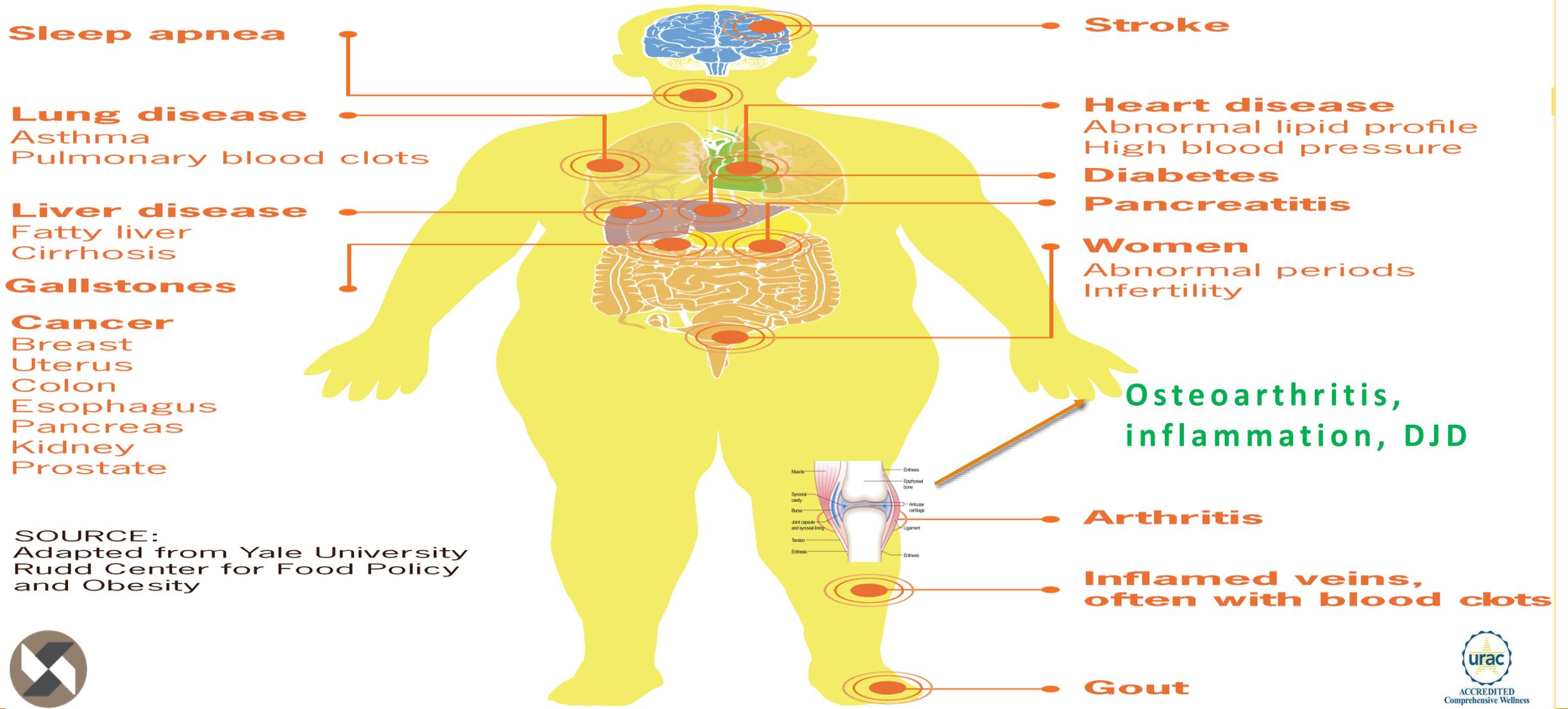
Osteoarthritis

Degenerative Joint Disease

And many other chronic diseases



Medical Complications of Obesity



SOURCE:
Adapted from Yale University
Rudd Center for Food Policy
and Obesity



Obesity in the Work Place





OBESITY IN THE WORKPLACE

Problems with Obesity: workplace impact

Obese workers have 30% to 50% more chronic health issues than heavy smokers or heavy drinkers.

- **Excessive Lost Work Days** due to sick days, doctor visits and long term absences due to disease treatment and work injuries.
- File more workers' compensation claims,
- **Higher medical and indemnity cost / claim**
- **Higher TTD due to delayed recovery** from a work place injury



Work Place Injuries

FACT SHEET

Overweight / obese workers file more claims according to a Duke University study. **Obese workers file 11.65 claims / 100 more claims compared to normal weight workers who file 5.8 / 100**

Health Risks associated with obesity are numerous and costly to employers; **increase medical and disability cost, lost productivity, absenteeism!**

Each overweight employee can cost an employers \$17,000 a year in extra absences, healthcare expense and presenteeism (too tired to work effectively)

A 5% to 10% weight loss can significantly decrease medical benefit costs.



Employer Costs Continue to Rise

\$250 Billion, Cost due to overweight / obese workers!

\$183 Billion in Lost Productivity

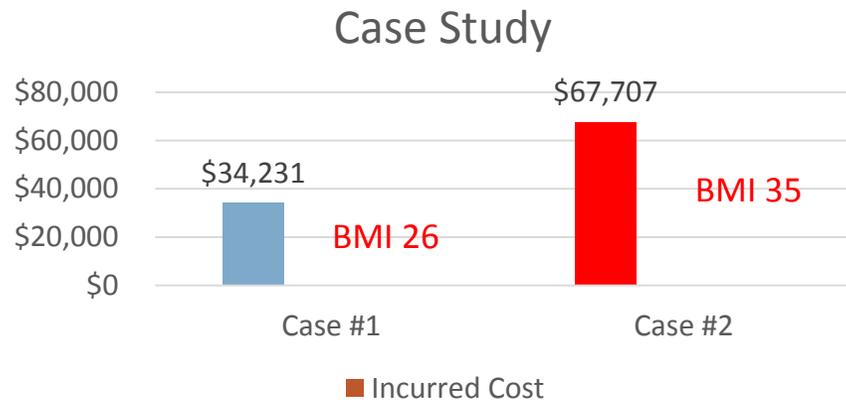
\$67 Billion in Medical Cost associated with workplace injuries



Case Study : slip and fall – knee injury



Two Cases; both slip and fall injury to knee; both received an arthroscopy; Case #1 Closed; Case #2 Open still on TTD; case subject to a PPD



Obesity and Joint Pain Facts



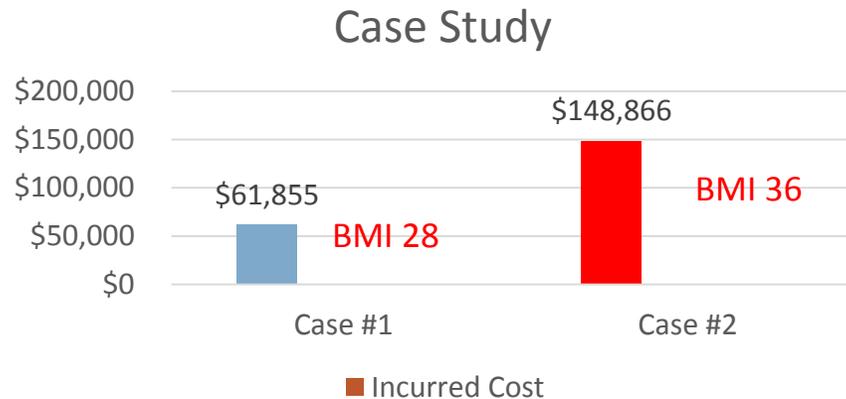
**Most prevalent in Working population
40-60 years of age!!!!**

- Obesity contributes to increased complaints of pain due to osteoarthritis related to insulin resistance (IR)
- Pain is also related to increased loading on weight bearing joints due to the increase weight (obesity)
- An obese person is 6 X more likely to have Osteoarthritis; for every 8# increase in weight there is a 40% increase in osteoarthritis of the weight bearing joints (ankles, knees, hips, SI joint (lumbar spine))

Case Study : Lifting Injury to Shoulder



Two Cases; both Lifting injury to shoulder ; both received an arthroscopy; Case #1 Open 10 months; working LD; Case #2 Open 7-months still on TTD \$16,747; both cases still open!



DM2 increase 41% over 5 - years

An estimated \$ 350 Billion Annually

- \$245 Billion Dollars on Direct Care

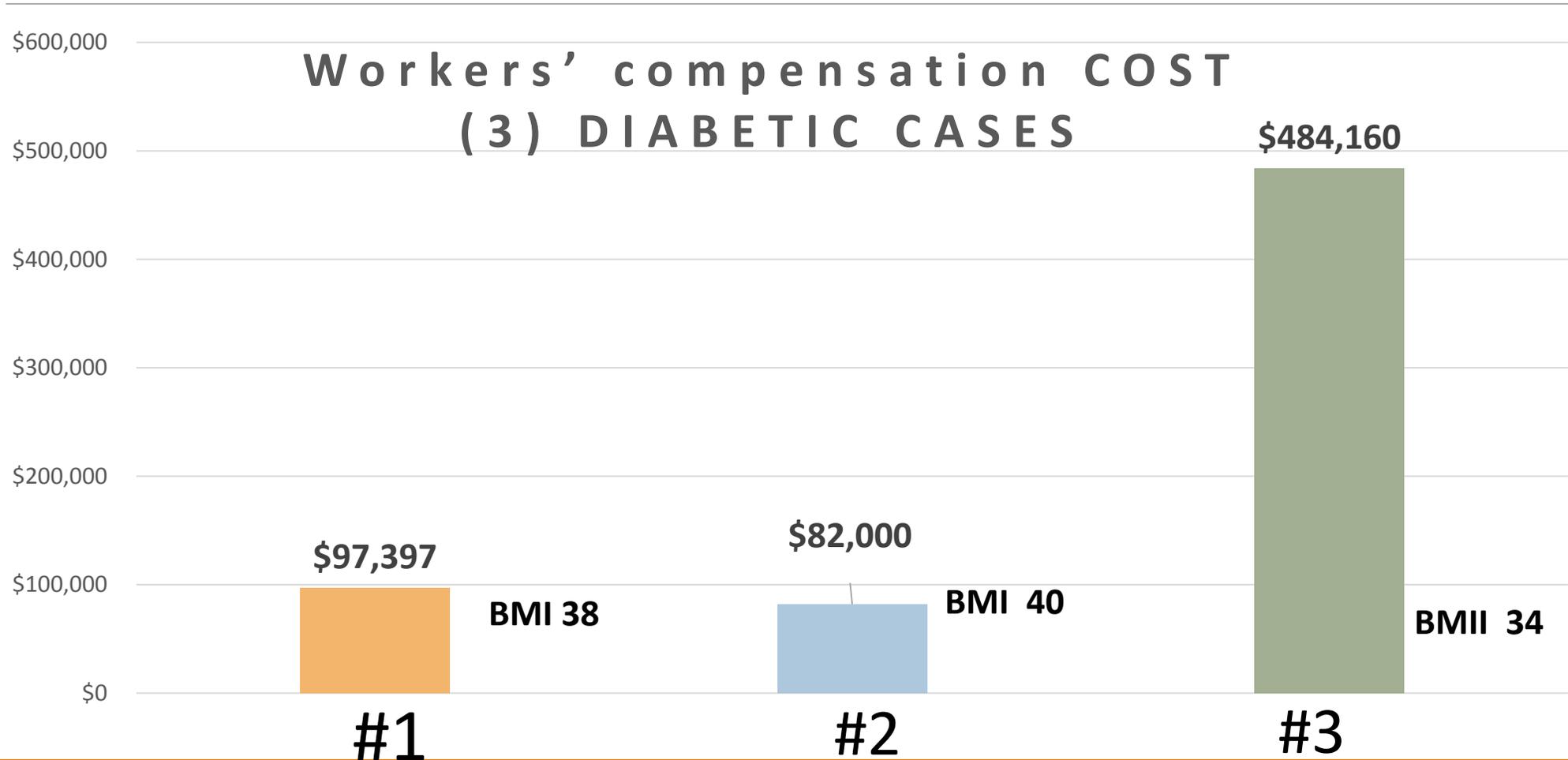
(Hospital 43%, Diabetic Supplies 12%, RX for Complications 18%)

- \$ 101 Billion spent on Reduced Productivity

Side Note: Uninsured DM2 patients have a 55% increase in Emergency Room Visits

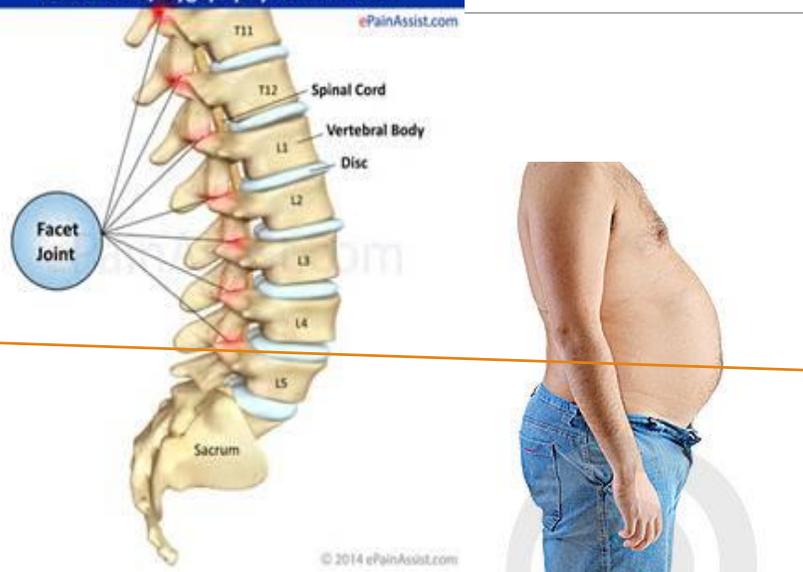


Type 2 Diabetes ↑ 41% in 5 years!



SPINE CARE IN U.S. \$ 2.2 Trillion Dollars

Facet Joint / Zygapophysial Joint Pain



Pain related to metabolic factors (IR) (inflammation) plus increased loading on **facet joints** due to obesity



Case Study; Lumbar Strain: Cost \$97,391

Male, Age 40; BACK STRAIN

Chief complaint: Back Pain due to slip and fall

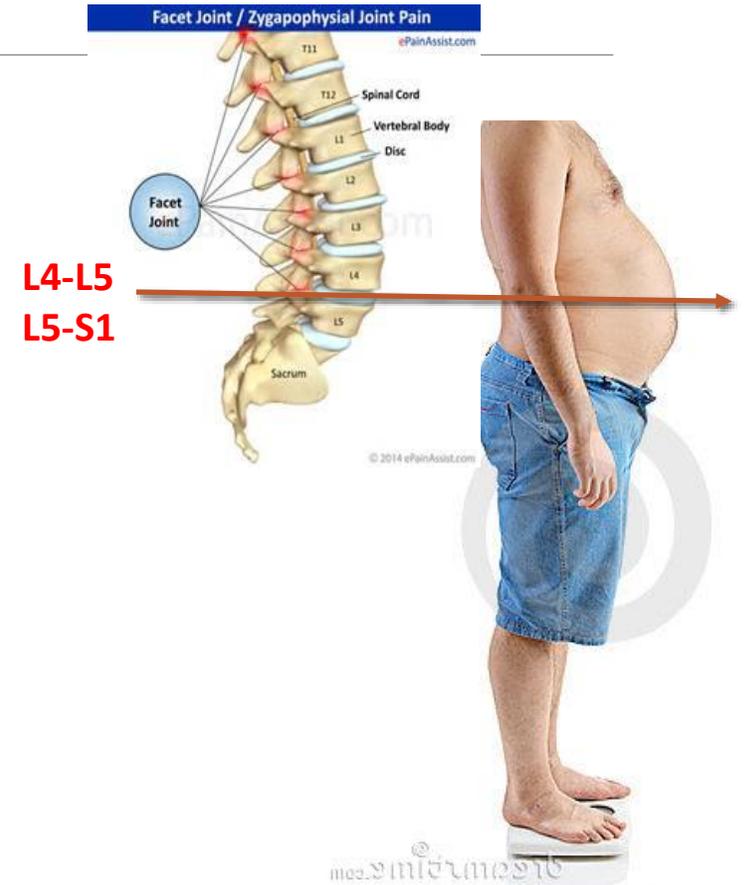
History of **DM2 with an A1C – 12** + (normal range is 5-6)

BMI 38 (obese)

Failed conservative care; claim open 1 year complains of back pain

Cost as of Today; \$ 97,391; waiting back surgery

Off work waiting for blood sugar control before surgery



CASE STUDY

HEART / LUNG CLAIM \$1.8 Million

Male. Age 50, Public Safety Officer < HEART ATTACK

BMI 30.6

BP 122/90

Non-smoker

Cholesterol 198 (normal)

Blood Sugar 100 (Pre-diabetic)

Insulin Resistance Score 7.1 (3.0 normal)

Metabolic Syndrome (5) markers



"THE BIG 5"

Case Study - Before

OBSESITY	BLOOD PRESSURE	BREATHING		LIPID PROBLEMS					BLOOD SUGAR	TOTALS
BMI	BP	Tobacco Use	Aerobic (METs)	Chol	LDL	HDL	Triglyc	Ratio	Glucose	
≥ 30	$\geq 140/90$	Yes	≤ 8.5	≥ 240	≥ 131	< 40	> 200	> 4.50	> 125	6
25-29.99	120/80-139/89	Past	$> 8.6 \& < 11.0$	200-239	100-130	40-60	150-200	3.50-4.50	100-125	2
< 25	$< 120/80$	No	≥ 11.0	< 200	< 100	> 60	< 150	< 3.50	< 100	2
30.5	122/90	No	8.4	198	106	38	270	5.21	100	

You have 6 high risk factors.

FRAMINGHAM RISK ASSESSMENT	TRIG:HDL RATIO	METABOLIC SYNDROME
Age: <input type="text" value="50"/>		Abdominal Obesity (Waist): <input type="text" value="1"/>
Gender: <input type="text" value="Male"/>		Triglycerides: <input type="text" value="1"/>
Total Cholesterol: <input type="text" value="198"/>		HDL Cholesterol: <input type="text" value="1"/>
Current Smoking: <input type="text" value="No"/>		Blood Pressure: <input type="text" value="1"/>
Systolic BP: <input type="text" value="122"/>		Fasting Glucose: <input type="text" value="1"/>
10 Year Risk of Developing Hard CHD: <input type="text" value="10%"/>		Metabolic Syndrome: <input type="text" value="Yes"/>
Assessment Date: <input type="text" value="11/02/2007"/>		
Assess if Cardiac or Diabetic Condition: <input type="text" value=""/>		



SpecialtyHealth

SPECIALISTS IN MANAGED HEALTHCARE & PREVENTION

Summary:

1. You have a 10% chance of having a cardiac event in the next 10 years.
2. You have metabolic syndrome.
3. Your risk level based on ATP III and Framingham is **Moderately High**.

Case Study – Results

“THE BIG 5”

Case Study

RISK	OBEISITY	BLOOD PRESSURE	BREATHING		LIPID PROBLEMS					BLOOD SUGAR	TOTALS
	BMI	BP	Tobacco Use	Aerobic (METs)	Chol	LDL	HDL	Triglyc	Ratio	Glucose	
HIGH	≥ 30	≥ 140/90	Yes	≤ 8.6	≥ 240	≥ 131	< 40	> 200	> 4.50	> 125	0
MODERATE	25-29.99	120/80-139/89	Past	> 8.6 & < 11.0	200-239	100-130	40-60	150-200	3.50-4.50	100-125	2
LOW	< 25	< 120/80	No	≥ 11.0	< 200	< 100	> 60	< 150	< 3.50	< 100	8
YOU MEASURED	25.8	115/64	No	11.0	122	62	51	45	2.39	92	8

You have 0 high risk factors.

FRAMINGHAM RISK ASSESSMENT		TRIG/HDL RATIO	METABOLIC SYNDROME		
Age:	51	9	Abdominal Obesity (Waist):	Men ≥ 40 in; Women ≥ 35 in. or BMI ≥ 30	0
Gender:	Male		Triglycerides:	≥ 150 or if taking medication for elevated blood triglycerides:	0
Total Cholesterol:	122		HDL Cholesterol:	Men < 40; Women < 50:	0
HDL:	51		Blood Pressure:	Sys ≥ 130; Dias ≥ 85 or Patient is Hypertensive:	0
Current Smoking:	No		Fasting Glucose:	≥ 100 or Patient is Diabetic:	0
Systolic BP:	115	Metabolic Syndrome:	3 or More Factors Present:	No	
10 Year Risk of Developing Hard CHD					
Framingham Risk Score:	3%				
Score Date:	01/16/2013				
Score if Cardiac or Diabetic Condition:	>				



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Summary:

1. You have a 3% chance of having a cardiac event in the next 10 years.
2. You don't have metabolic syndrome.
3. Your risk level based on ATP III and Framingham is Low.



Our Future Workers of America





Future Workers of America

Children are 23% of the U.S. Population

24.3 Million children (1 out of 3) are overweight or obese

14.6 (Million(1 out of 6) are excessively obese

12.9 Million children Poverty

42.3 Million children low income families

Poverty and Low Income families are at increase risk for obesity

Nevada has the highest rate of uninsured children 14.9%



WHAT IS THE ANSWER?



Human
Resources /
Employee
Benefits



Workers'
Compensation /
Workplace Safety



Wellness And Prevention Programs **WORKING TOGETHER**

Human Resources / Benefits with Occupational
Health and Safety Working Together!



THANK YOU!

