



# ALZHEIMER'S

A Metabolic Disease of Aging

***Alzheimer's disease is:  
"...Quite possibly, type 3 diabetes."***

**DR. SUZANNE M. DE LA MONTE**

Neuropathologist, Researcher & Professor of Pathology  
Warren Alpert Medical School of Brown University

## 100 BILLION

NEURONS IN THE HEALTHY BRAIN; BRAIN CELLS REQUIRE TWO TIMES MORE ENERGY THAN OTHER CELLS IN THE BODY, AND MOST OF THE ENERGY IS SUPPLIED THROUGH GLUCOSE METABOLISM

## 6

RANK OF ALZHEIMER'S DISEASE (AD) AS A CAUSE OF DEATH IN THE UNITED STATES



## 1 IN 3

NUMBER OF OLDER ADULTS WHO DIE WITH AD OR ANOTHER FORM OF DEMENTIA

## 0

NUMBER OF CURRENTLY APPROVED DRUGS THAT HALT OR SUBSTANTIALLY SLOW AD PROGRESSION

PERCENTAGE OF DRUGS IN THE PIPELINE WITH THERAPEUTIC TARGETS PREVIOUSLY SHOWN TO BE ONLY MODERATELY EFFECTIVE IN STABILIZING OR IMPROVING SYMPTOMS

## ~67%

## 100+



NUMBER OF DRUGS IN CLINICAL TRIALS FOR AD

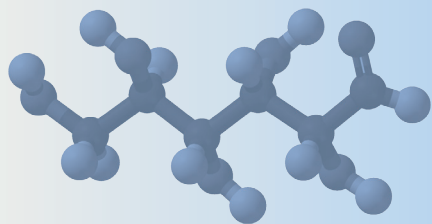
### INSULIN RESISTANCE

THE AGE-RELATED FACTOR MOST LIKELY TO BE A CAUSAL LINK IN BOTH DIABETES AND AD  
(*J Clin Invest.* 2012;122:1316-1338)



## GLUCOSE=RISK

HIGHER GLUCOSE LEVELS MAY BE A RISK FACTOR FOR DEMENTIA, EVEN AMONG PEOPLE WITHOUT DIABETES  
(*NEJM.* 2013;369:540-548)



## MSDC-0160

- ✓ A NOVEL mTOD-MODULATING INSULIN SENSITIZER DEVELOPED BY METABOLIC SOLUTIONS DEVELOPMENT COMPANY (<http://www.msdrx.com>) THAT IS UNDER CLINICAL INVESTIGATION TO TREAT AD
- ✓ STUDIES HAVE SHOWN MSDC-0160 IMPROVES INSULIN RESISTANCE IN PATIENTS WITH TYPE 2 DIABETES
- ✓ IN PATIENTS WITH DEMENTIA DUE TO AD, MSDC-0160 HAS BEEN SHOWN TO HAVE A FAVORABLE EFFECT ON GLUCOSE METABOLISM IN REGIONS OF THE BRAIN KNOWN TO DECLINE DURING THE PROGRESSION OF AD

## 2014

- ✓ YEAR MSDC EXPECTS TO BEGIN PHASE 2B CLINICAL TRIAL FOR PATIENTS WITH DEMENTIA DUE TO AD

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#endalz #infographic #ADDF #insulin #pharma #Alzheimers  
#type3 #diabetes #metabolicdiseasesofaging #mTOD #mTODmodulator