

Lifestyle Interventions and Weight Loss Pharmacotherapy for NAFLD

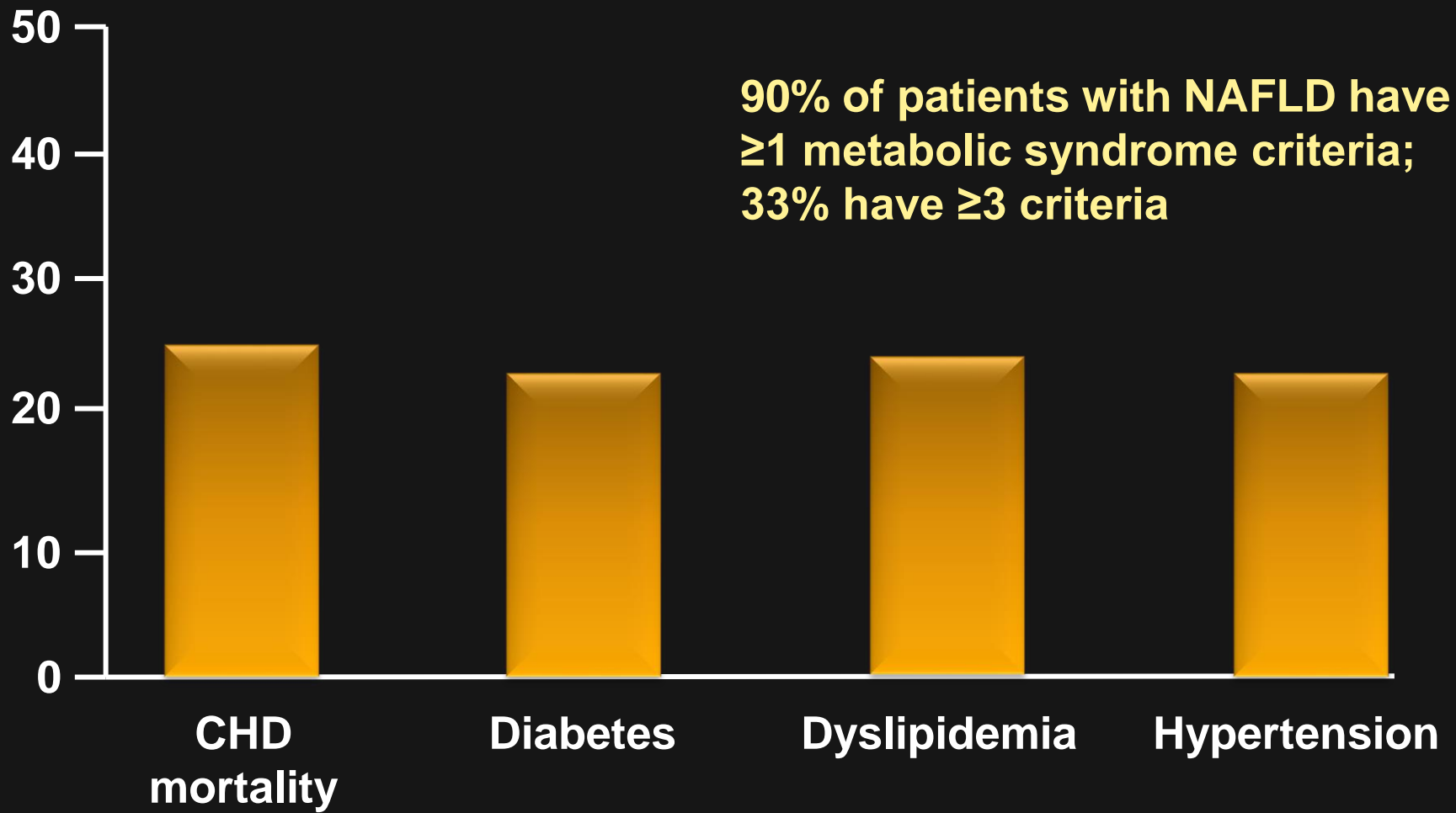
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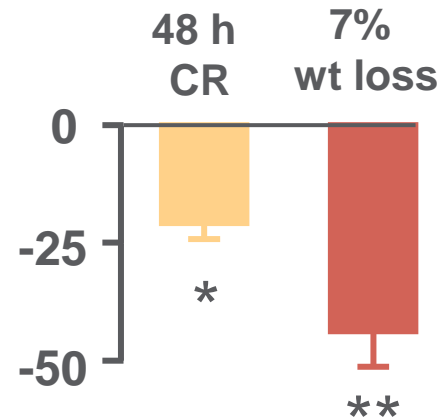
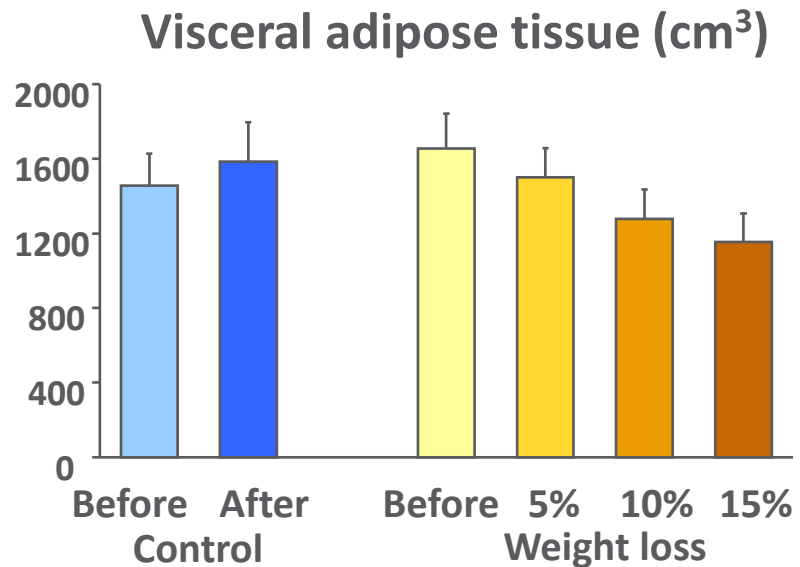
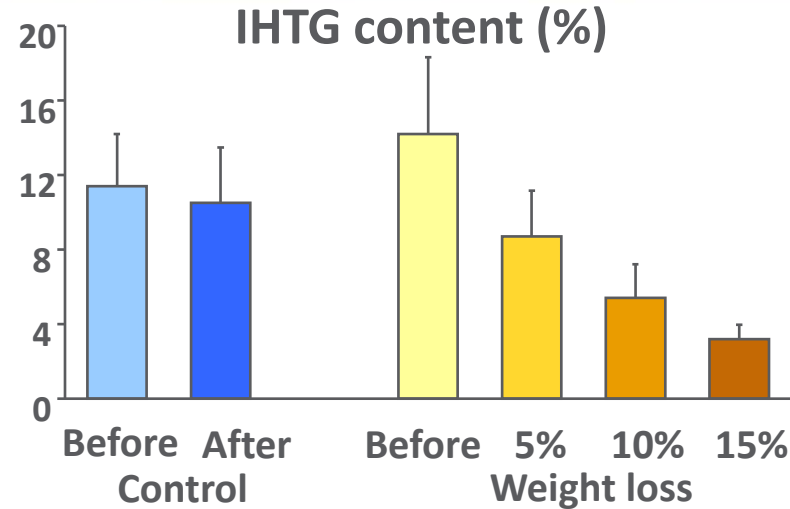
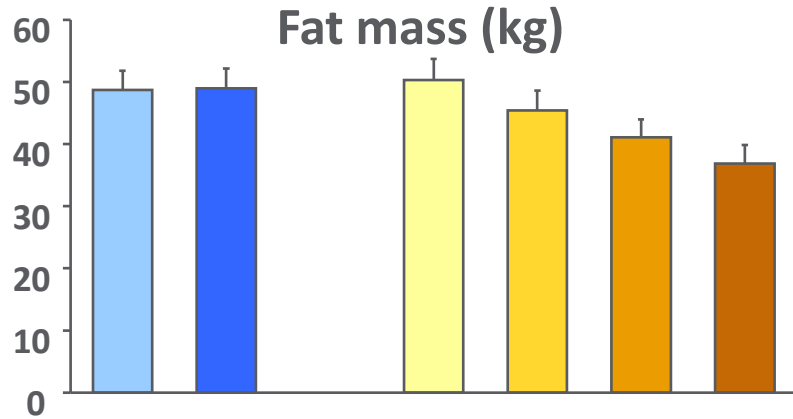
NAFLD is part of a Constellation of Cardiometabolic Diseases in People with Obesity

Incidence over 5-7 years (%)



90% of patients with NAFLD have ≥ 1 metabolic syndrome criteria; 33% have ≥ 3 criteria

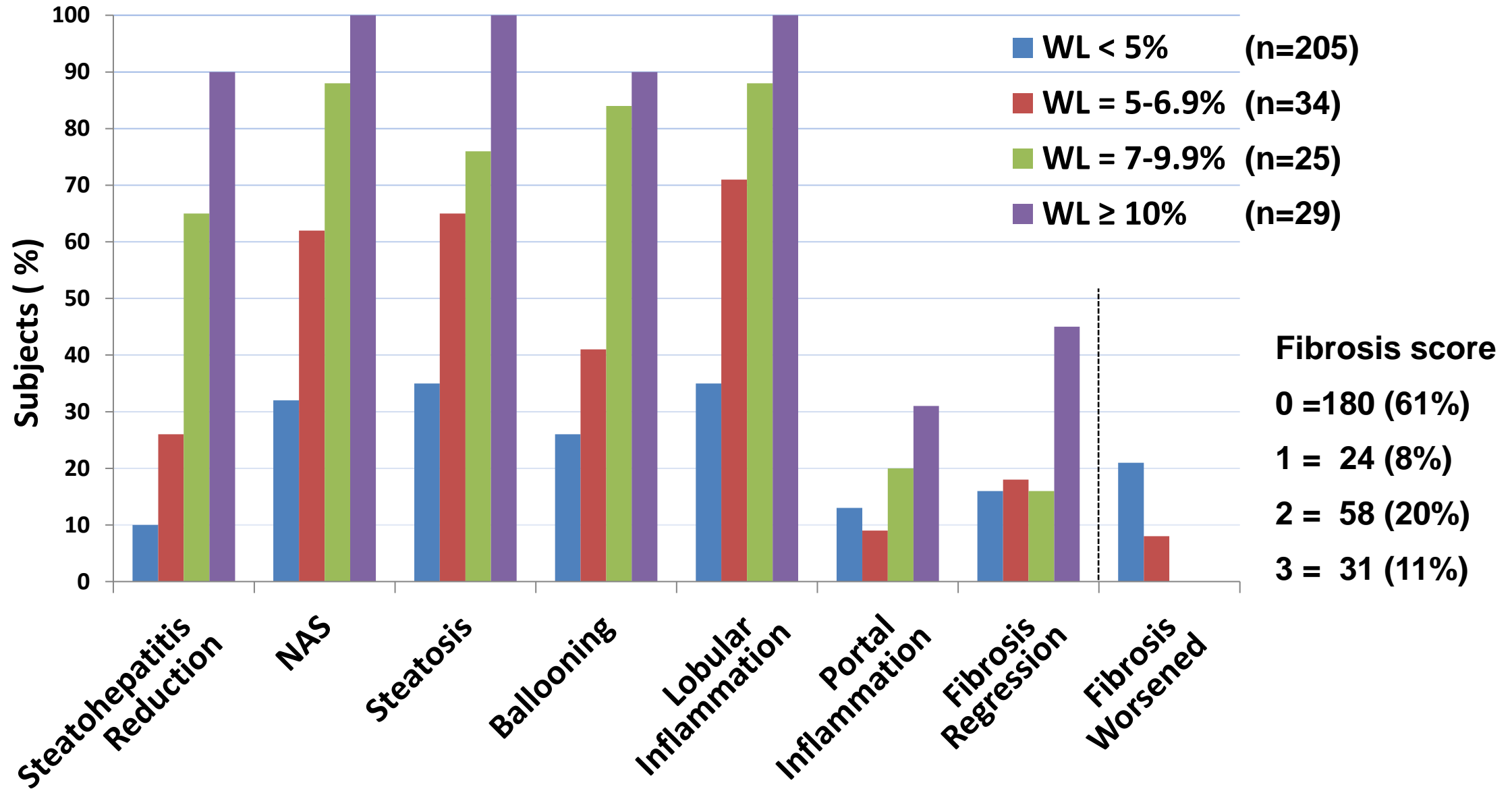
Intrahepatic Triglyceride (IHTG) is Extraordinarily Sensitive to Calorie Restriction (CR) and Weight Loss



Weight loss independent benefits:

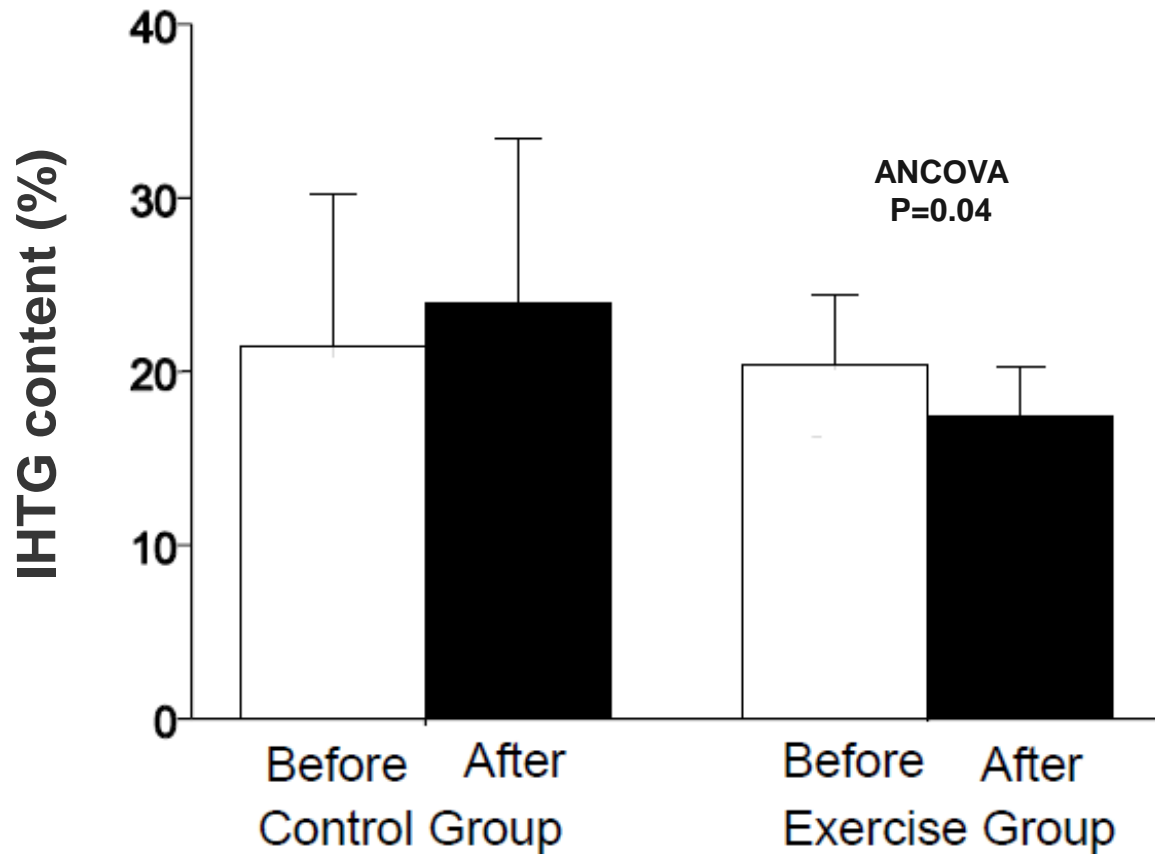
- Ketogenic diet**
- Mediterranean diet**
- Decreased fructose/sugar**
- Increased fish oil**

Weight Loss Improves Liver Histology, but Fibrosis is Most Resistant



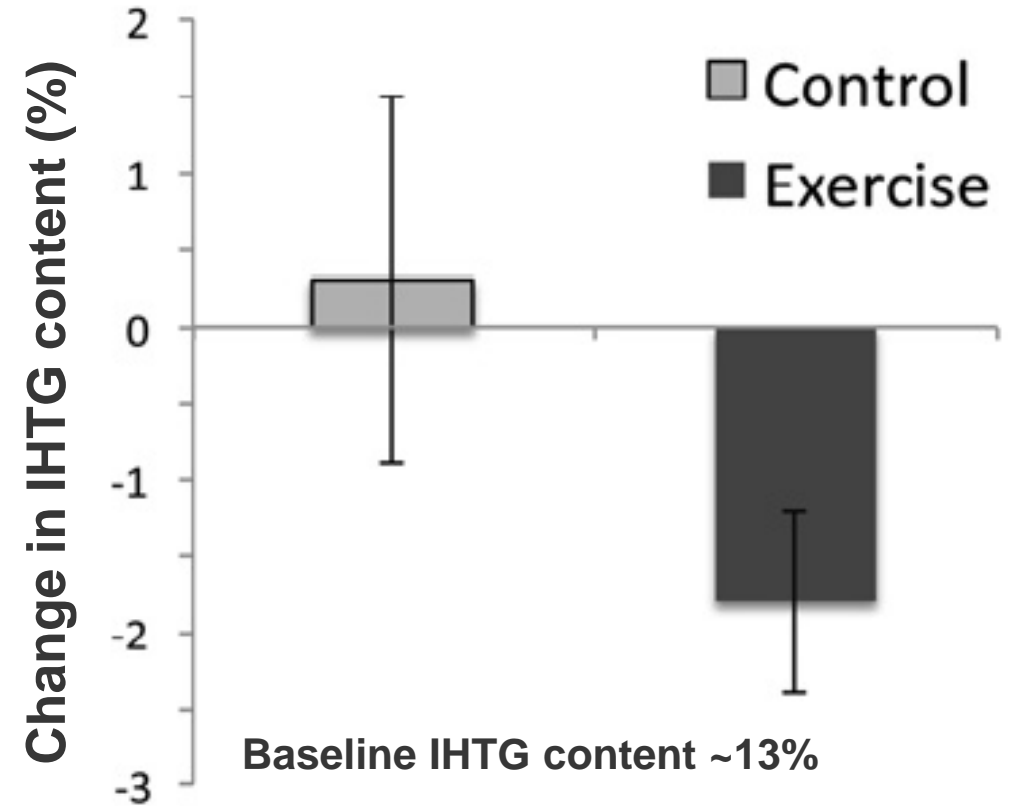
Exercise (without weight loss) has Modest Effects on Intrahepatic Triglyceride (IHTG) Content

Endurance exercise 5x/wk x 16 wks
(300 min/wk moderate intensity exercise)



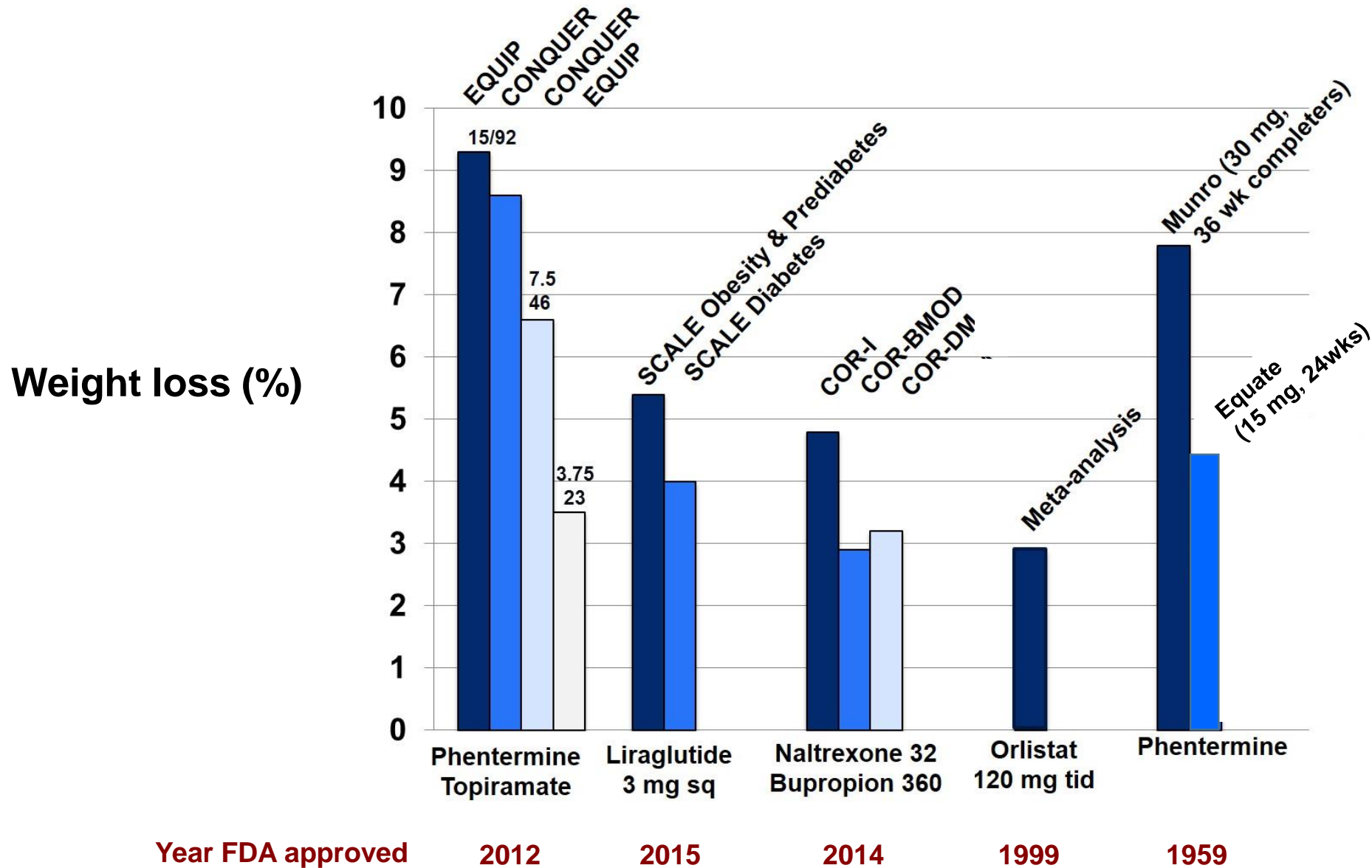
S. Sullivan et al. Hepatology 2012

Resistance exercise 3x/wk for 8 weeks



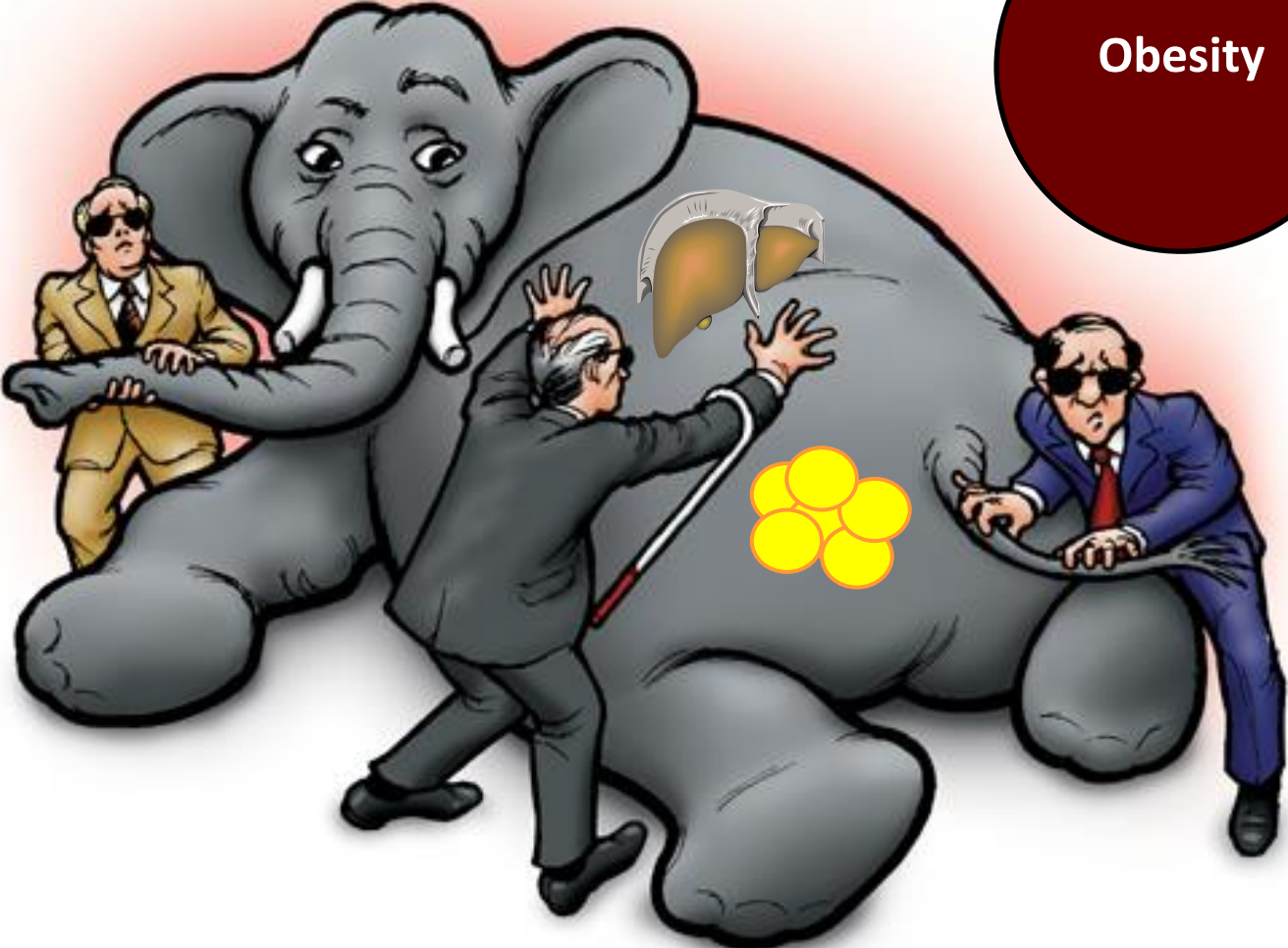
K. Hallsworth et al. Hepatology 2011

FDA-approved Obesity Pharmacotherapy Enhances Lifestyle-induced Weight Loss (placebo-subtracted weight Loss at 1 year, ITT-LOCF)



Selection criteria:
 1. Contraindications
 2. Cost

NAFLD Represents the Liver's Response to Systemic Metabolic Insults in Predisposed People



Obesity

Diabetes

**Insulin Resistance
Dyslipidemia
High blood pressure
Adipose tissue inflammation & fibrosis**

NAFLD

CVD & CHF