


**SMALL DOSES OF T3**  
**DURING WEIGHT REDUCING DIET IN OBESE WOMEN,**  
**INCREASE SHBG LEVELS**  
**WITHOUT FREE FAT MASS CATABOLISM**

***Authors*** A. Mortoglou  
E. Kapantais  
D. Chrysohoou

**Endocrine & Metabolic Department**  
**Athens Medical**  
**Athens, Greece**



# Introduction

- **It is documented that**  
during weight loosing diets serum T3 decreases, resulting in a fall of resting metabolic rate.
- **Treating such patients**  
with small doses of T3, can prevent the adaptation of RMR to lower levels and increases serum SHBG.
- **The contraindication**  
for the use of T3 in clinical practice is the free fat mass catabolism, but this have been shown only in small number of obese persons and in combination with VLCD.

# Purpose

To investigate the influence of T3 treatment on

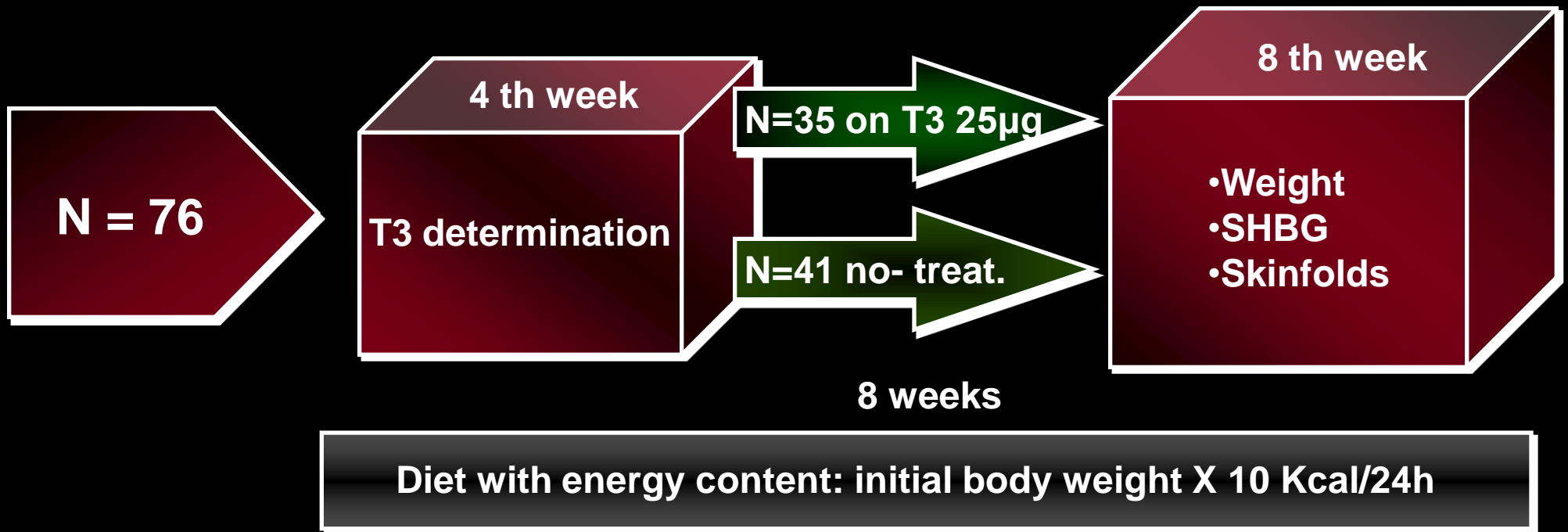
**Qualitative weight loss**

and on

**SHBG levels**



# Study Design



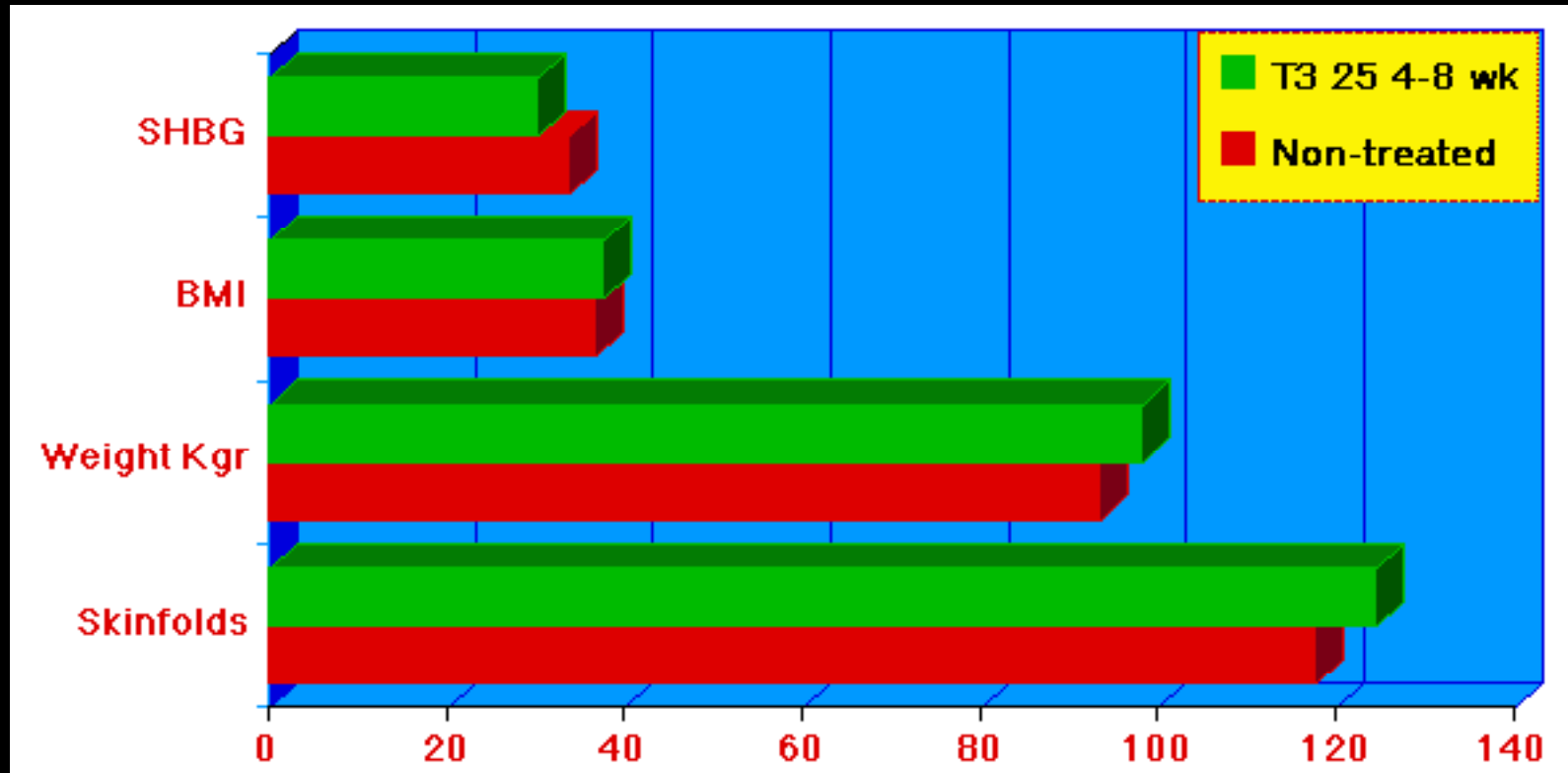
# Subjects and Methods

- N = 76 Obese women
- Age =  $35 \pm 12$
- Weight Kgr =  $95.5 \pm 14.9$
- % increase from ideal body weight =  $178 \pm 25$
- BMI =  $37.03 \pm 5.30$
- Sum of four\* skinfolds mm =  $120.7 \pm 26$
- T3 ng/dl =  $144.7 \pm 24.5$
- TSH  $\mu$ U/ml =  $2.28 \pm 1.28$
- SHBG nmol/L =  $32.04 \pm 9.56$

\* : *Biceps, Triceps, Subscapular, Suprailiac*

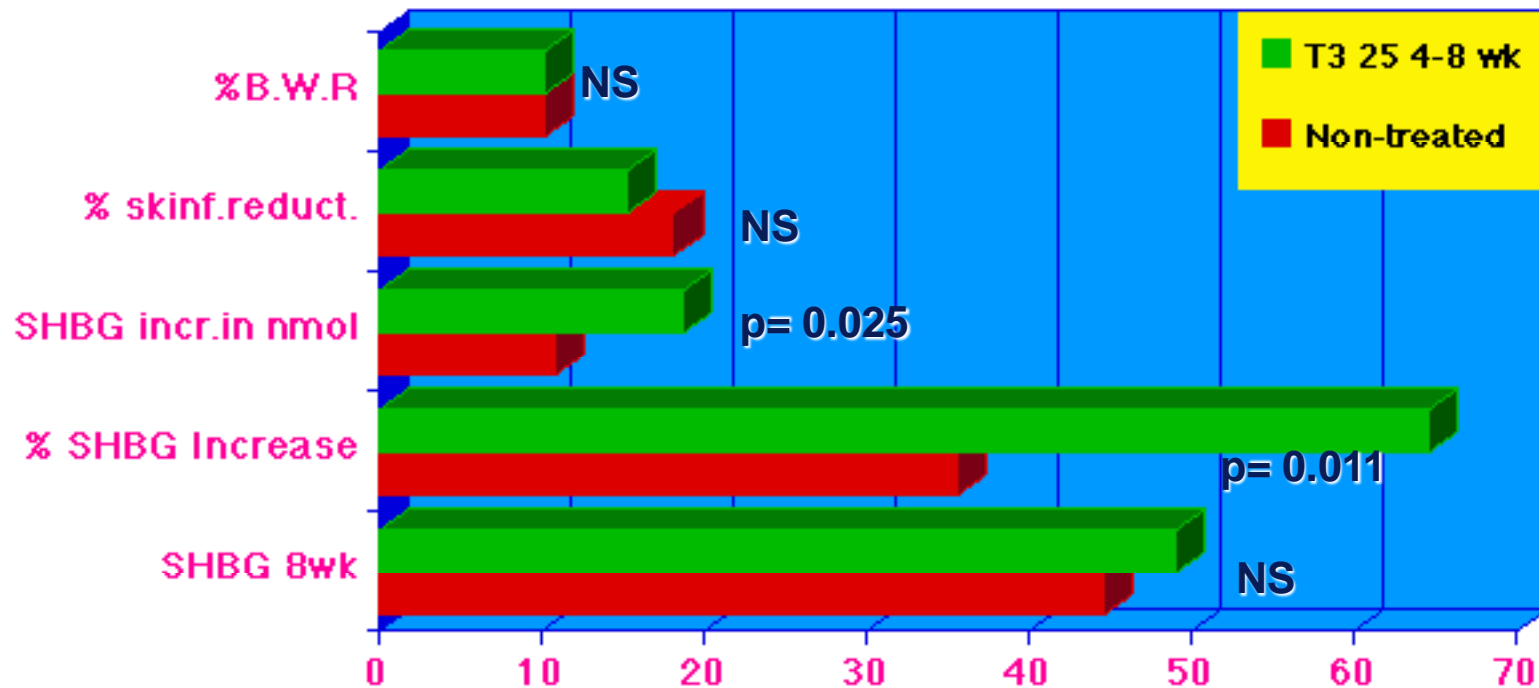
*Mean  $\pm$  SD*

# Results 1.

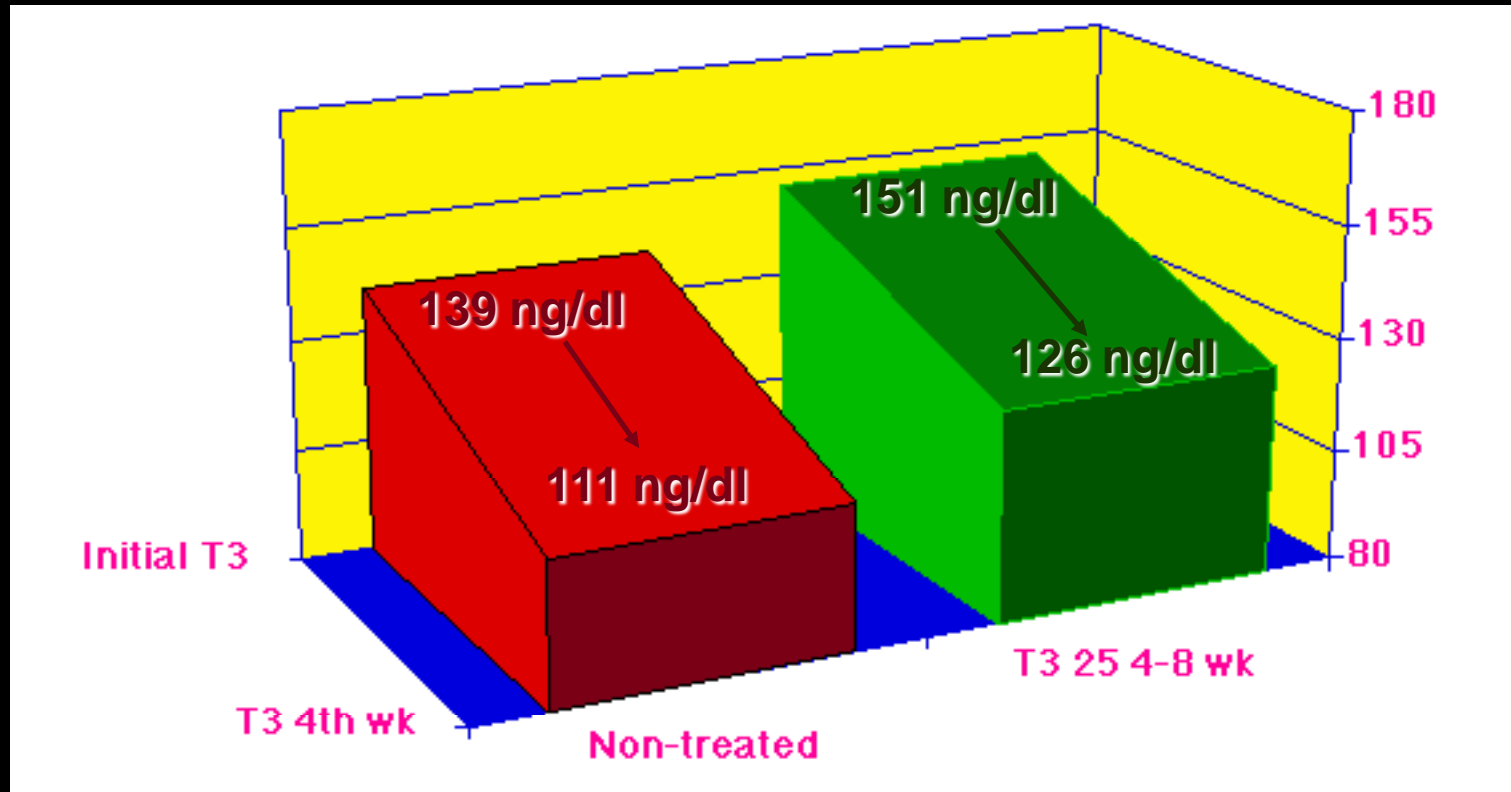


**NS**

# Results 2.

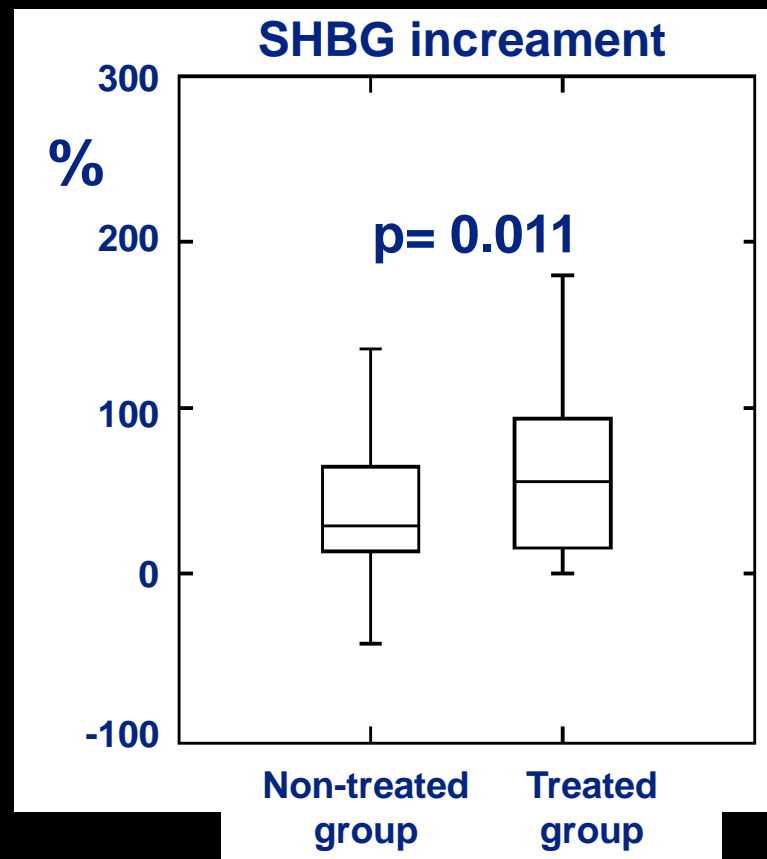
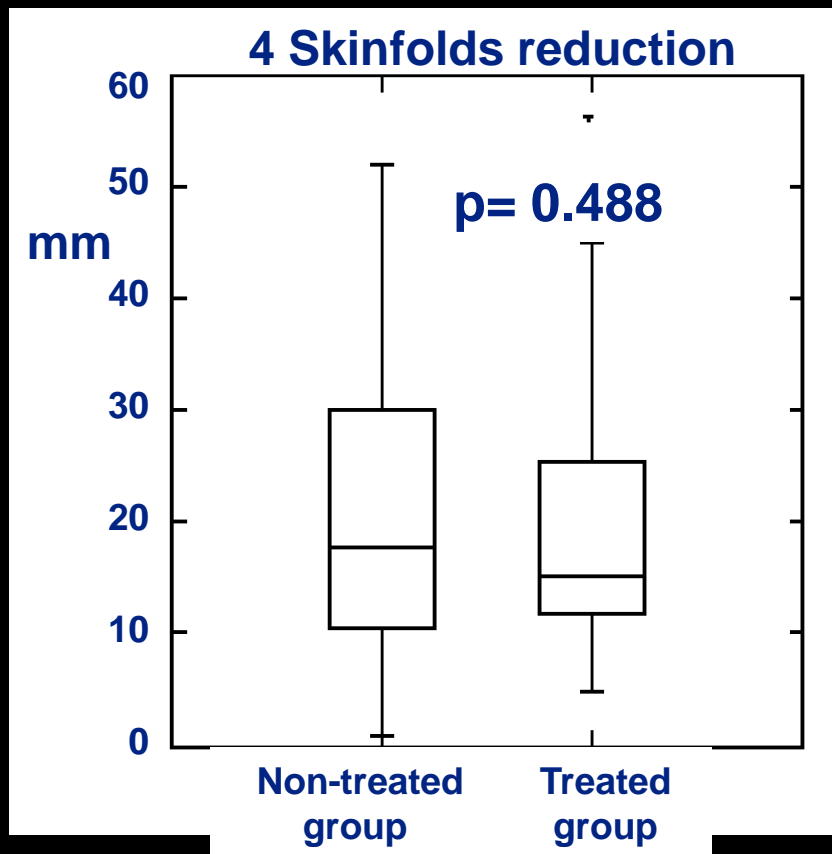


# Results 3.





# Changes in the sum of 4 skinfolds & SHBG levels in 76 Obese women after an 8 week weight reducing regimen



Treatment: T3 25  $\mu$ g/d from 4th to 8th week

# Conclusion

**The replacement of T3 fall  
during weight reducing diet**

**increases SHBG levels**

**more than the expected from weight loss**

**without any further FFM  
catabolism**

