

# 29 NEXENTURY

## KLF14 Gene Activator

---



## Clinical Study :

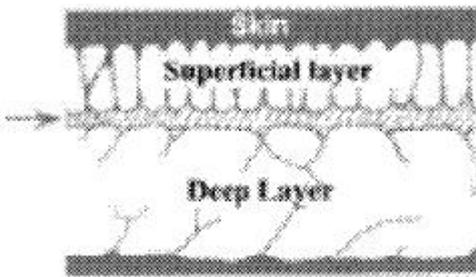


Conducted by / Dijalankan Oleh :  
Prof. Parker-Katiraei. Chief Scientist, The Research Team of Genetic Medicines, Institution of Biomedical Science, Switzerland. Professor in Genetic Medicines, Harvard University, Boston, USA.

### Details:

Genome-wide association studies have identified many genetic variants associated with complex traits. In early 2010, Prof. Parker-Katiraei leading a Research Team of Genetic Medicines, Institution of Biomedical Science, Switzerland, started the first clinical study with KLF 14 Activator in 1800 human subjects. Different ethnics took part in this clinical study, comprises of 600 Europeans, 600 Asians and 600 African Americans, with males and females, age between 16 - 65. All subjects were treated at different body parts with 5 ml of KLF 14 Activator of

different duration, depending on their Body Mass Index, for a 30 days course. Subcutaneous adipose tissue (SAT) thickness was then measured by ultrasound at five body sites and compared with the corresponding segmental fat mass measured by Dual Energy X-ray Absorptiometry (DXA). These data indicate that ultrasound measurement of SAT thickness proportionally reflects segmental fat mass and accurately predicts % body fat in young adults.



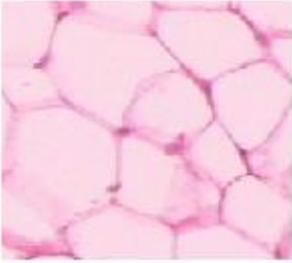
### **Subcutaneous adipose tissue (SAT).**

One of the more interesting transcripts revealed by these analyses is human adipose expression is highly heritable and is down-regulated by the KLF14.

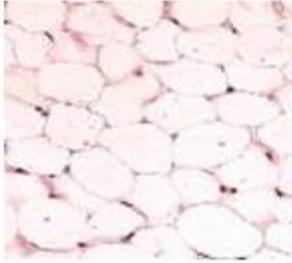
Results :

Throughout 30 days of treatments, adipose tissue shrinks its size and reduce its mass contents.

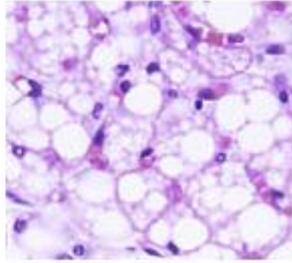
DAY 1



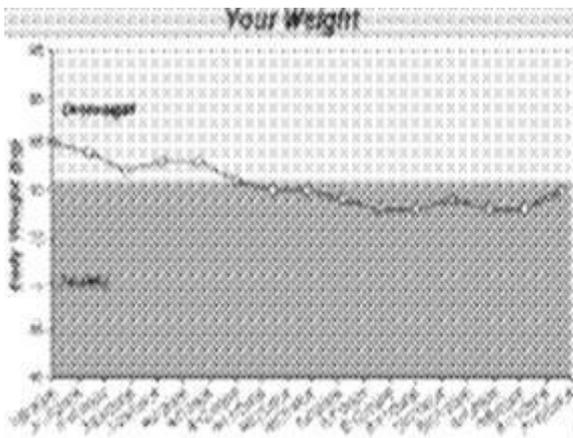
DAY 10



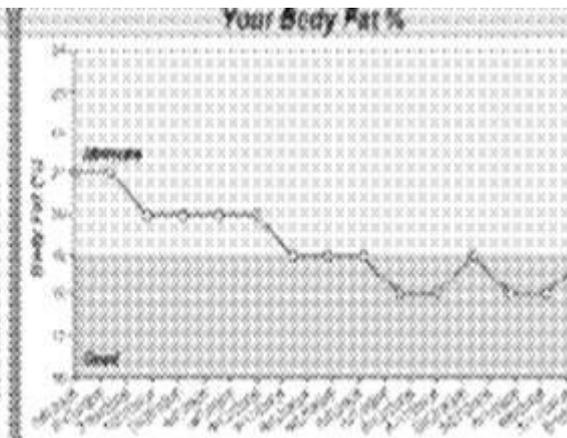
DAY 30



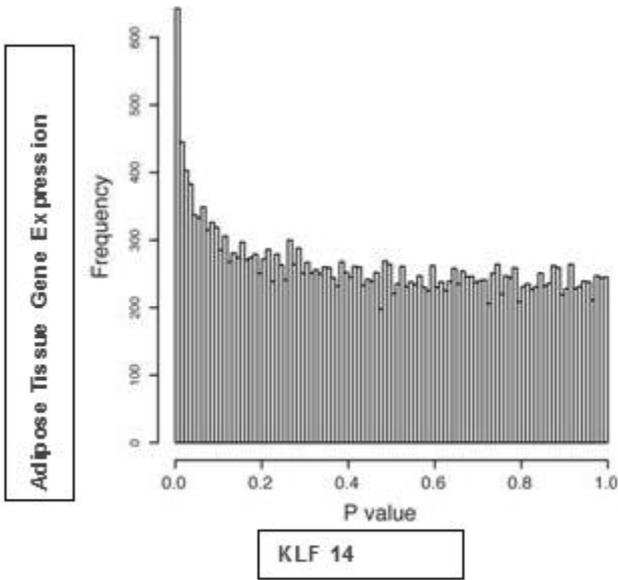
Adipose Tissue Mass by DXA throughout the 30 days course of KLF 14 Activator.



Body Weight vs. KLF 14 Activator.



Body Fat % vs. KLF 14 Activator.



KLF14 is a master regulator of gene expression in adipose tissue

Frequency of gene expression in Adipose Tissue is being skewed down & stabilized by KLF 14 Activator.



Before



After



Before



After



Before



After



Before



After



Before

After

## **Clinical Study 2 :**

Researchers of the Albert Einstein College of Medicine in New York City, have developed a new mouse that sheds its fat when apply with KLF 14 Activator. To accomplish this, the team genetically altered the fat cells of mice by applying of KLF 14 Activator, so that it would lock on to a molecule inside fat cells. FAT-ATTAC mice lost all their fat within 3 or 4 days. This is suggesting a link between rapid fat loss and high metabolism (since the mice couldn't store the energy they were consuming).



FAT-ATTAC mice treated with KLF 14 Activator shed their fat (left) versus those given a placebo (right).

### **Conclusion :**

Weight loss and the ins and outs of it so to speak, have been many people life for years. You may not be "blessed" so with a good metabolism. You definitely do know people that fit within that category. Most everyone knows someone like that, who can eat horrendously and in massive quantities yet be as thin as a rail. The genetics are undeniable, and as pleasing as it may be for some people to sit back and bitch people out for not exercising, it is in fact more of a challenge for some people than others. Denying scientific discovery based on a very narrow personal perspective only makes one look ignorant. If you have never had to struggle with it, take it from someone who has, and has accomplished the goal, it is easy to make it sound simple. Just eat less and exercise right? In the end if you haven't done it, you should probably step back, re-evaluate your advice,

and try KLF 14 Activator. This clinical study provides a mechanistic understanding of the effect of the KLF14 Activator on metabolism , inhibit the growth & nutrients intake of fat cells and offers a potential solution for obesity and other complex traits.

## References :

1. ^ "Klf14 Kruppel-like factor 14 [Musmusculus] - Gene result".
2. Master regulator' gene for obesity and diabetes discovered .Wellcome Trust News | 16 May 2011.
3. ' Master switch gene for obesity' NHS Choices | 17 May 2011.
4. Identification of an imprinted master trans regulator at the KLF14 locus related to multiple metabolic phenotypes. Small KS, et al. Nat Genet, 2011 Jun. PMID 21572415.
5. The Genetic and Epigenetic Basis of Type 2 Diabetes and Obesity. A W Drong, C M Lindgren & M I McCarthy. Clinical Pharmacology & Therapeutics 92, 707-715 doi:10.1038/clpt.2012.149
6. DailyTech - Gene "KLF14" Acts as Switch for Type 2 Diabetes, Obesity [www.dailytech.com/Gene+KLF14+Acts...+/article21640.htm](http://www.dailytech.com/Gene+KLF14+Acts...+/article21640.htm)
7. Identification of the Imprinted KLF14 Transcription Factor

Undergoing Human-Specific Accelerated Evolution by:  
Layla Parker-Katiraei, Andrew R. Carson, Takahiro  
Yamada, Philippe Arnaud, Robert Feil, Sayeda N. Abu-  
Amero, Gudrun E. Moore, Masahiro Kaneda, George H.  
Perry, Anne C. Stone, Charles Lee, Makiko Meguro-  
Horike, Hiroyuki Sasaki, Keiko Kobayashi, Kazuhiko  
Nakabayashi, Stephen W. Scherer

8. Subcutaneous and visceral adipose tissue: their relation to the metabolic syndrome BL Wajchenberg - Endocrine reviews, 2000 - Endocrine Soc