

Obesity and Relative Significant Risk Factor for Atherosclerosis

Department of Molecular Medicine and Pathology, The University of Auckland, New Zealand

Keywords: Adipokines; Adiponectin; Atherosclerotic vessel; TNF;

and adiponectin, govern fat metabolism, energy balance, and insulin sensitivity, and hence influence obesity-related metabolic diseases. Because of their influence on the activity of endothelial cells, arterial smooth muscle cells, and macrophages in vessel walls, several adipokines have lately been viewed as direct connections between obesity and atherosclerosis, regardless of their effects on glucose and fat metabolism. The discovery of a novel adipokine that controls the atherosclerotic process might open up new avenues for creating more effective cardiovascular disease prevention strategies [1]. Adipokines that mediate obesity and atherosclerosis, such as adiponectin, resistin, adipocyte fatty acid binding protein (A-FABP), omentin-1, and chemerin, will be discussed in this study.

Introduction

Section 1:

As people gain weight and their adipocytes get larger, the adipose tissue undergoes molecular and cellular changes that impact systemic metabolism. To begin, macrophages build up in fat tissue, causing local inflammation. As obesity rises, adipose tissue produces a number of proinflammatory mediators. Obese people's adipose tissue expresses more proinflammatory proteins, such as TNF- and IL-6, than lean people's adipose tissue. Obesity increases the amount of macrophages in adipose tissue, which appear to serve as scavengers of apoptotic adipocytes. Obese people have also been shown to have a significant increase in these scavengers [2, 3]. Numerous metabolic dysfunctions associated with obesity, such as systemic inflammation and atherosclerosis, are thought to be caused by macrophage accumulation and consequent local inflammation.

ØÉÀ Úæ { æáÉÀ SÉÀ Ýæ { æ { [c[ÉÀ TÉÀ Úæ) á^ÉÀæ) áÁ ÖÉÀ RÉÀ Š [•\`c[Á ÇFJJ ÍDÁ Ö]Çæc^ÁÁ
^É]!^••í[]Á [-Ác]æ) •- [: { á) *Á*! [, c@Á-æ&c [iÉ Áí) kæáí] [•^Ác]•~^Á-í [{ Á [á^•^Á { æ&^ÉÀ

ÚÉÁÖí) cÉÖÉÁ T íc&@^||Éæ) áÍÖÉÁ T íc&@^||ÇG€€ ÍDCEáí] [&^c^Á^æc@k^,) ^•Á { æ&í [] @æ*^Á

TÉÁVæ!æ\8í [|~ÉÁCEÉÁÖÉÁÖ!áæ &æÉÁÖÉÁW•æ)æ)ÉÁÚÉÁÖ^Ç^&æÚÉÁ S [&æàæ ÉÇG€€HDICE&~c^Á
^ ^&cÁ [-Á @^ { [áíæ]~•í•Á []) Á •^!~ { Á |Ç^Á •Á [-Á c@^Á] : [á) 'æ { { æc [i~Á &^c [\á) ^•ÉÁ
T^áíæc [i•Á [-ÁQ) 'æ { { æc [] ÁFGÇFDKFI . FJÉÁ

ÖÉÁ Sæ||•• [] ÉÁ SÉÁ Ší) á^||ÉÁ T ÉÁ Úcc [•• [] ÉÁ SÉÁ Úí4•c:4 { ÉÁ ÖÉÁ Öæ||•• [] ÉÁ^cÁæ|ÉÁ ÇFJJ ÍDÁ