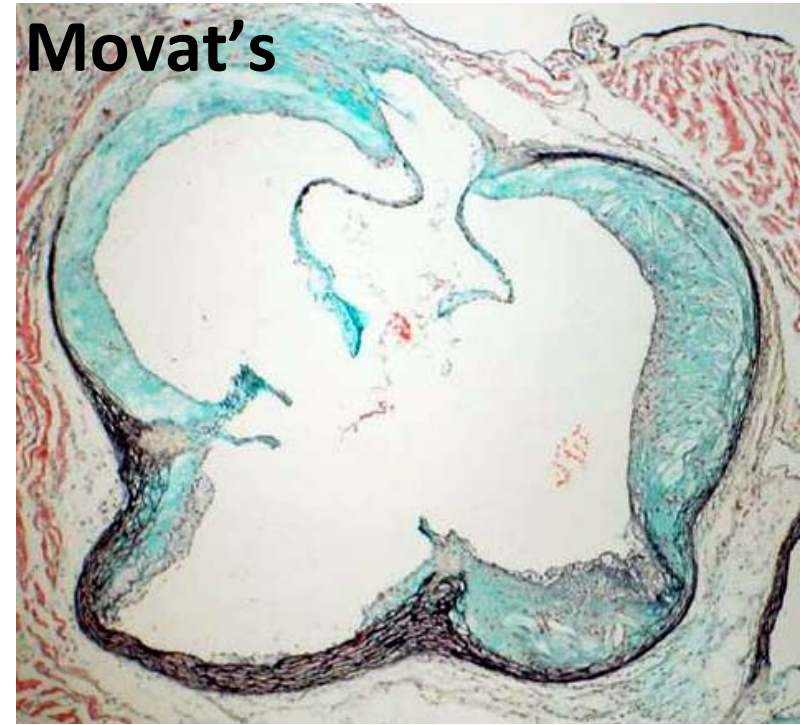
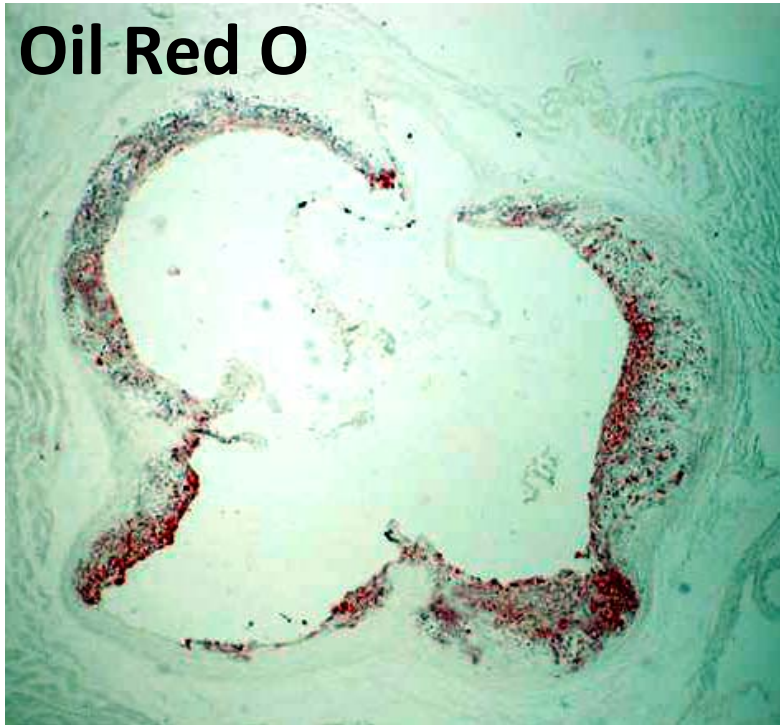


Atherosclerosis and Adipose Tissue Methods

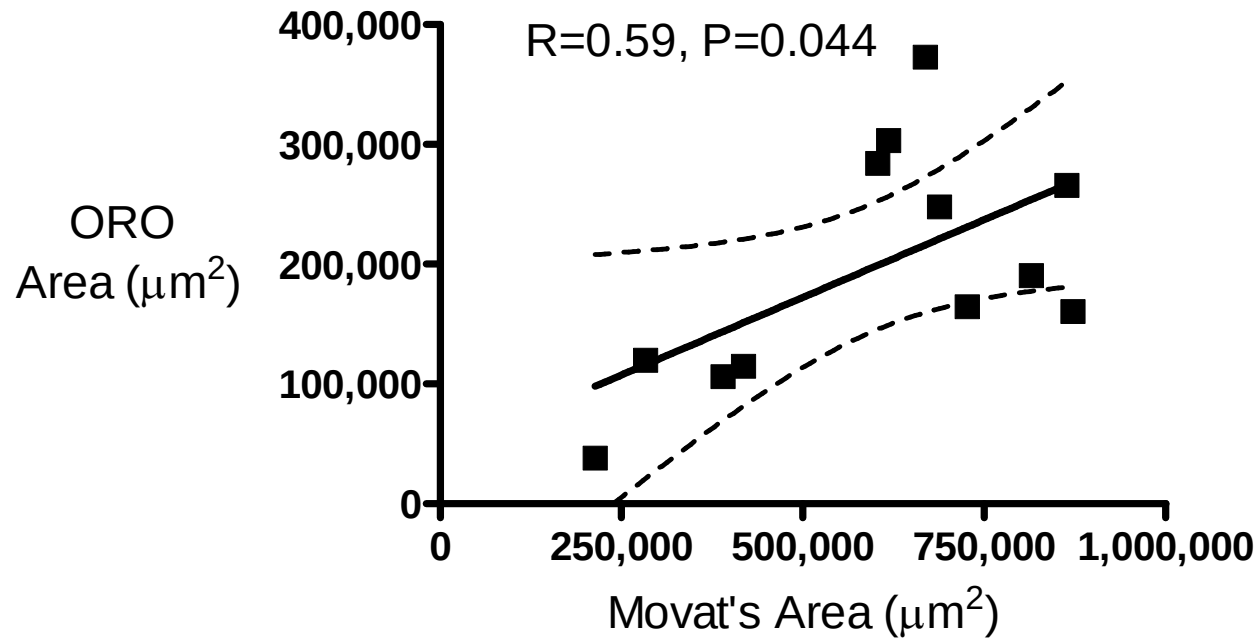
- Aortic Sinus Lesion Area:
 - Comparison of Lesion Areas:
 - Oil Red O (ORO) vs. Movat's pentachrome stains
 - Performed sequentially on same tissue section
- Coronal (“Candy-Cane”) Sections of Aorta:
 - New Method:
 - Evaluation of Aorta and Major Branches
 - Alternative to *En Face* Method?
- Adipose Tissue:
 - Effects of “Diabetogenic” Diet on:
 - Macrophage accumulation
 - Extracellular Matrix

Atherosclerosis: Aortic Sinus Lesion Evaluation by Oil Red O vs. Movat's

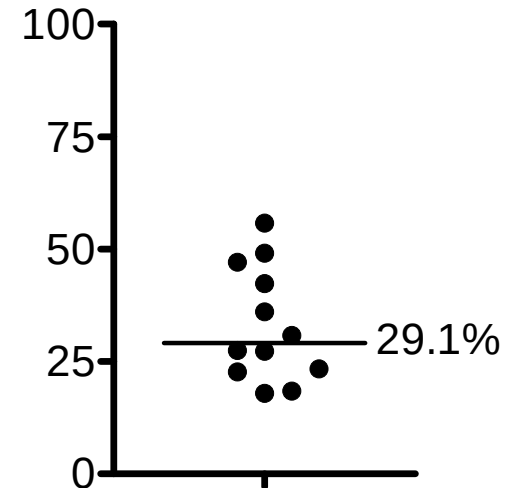


ApoE-/- mouse: Sequential Oil Red O and Movat's
Pentachrome staining on the SAME SECTION

ApoE-/- Mice: Lesion Areas by Oil Red O (ORO) and Movat's Methods ($N=12$)

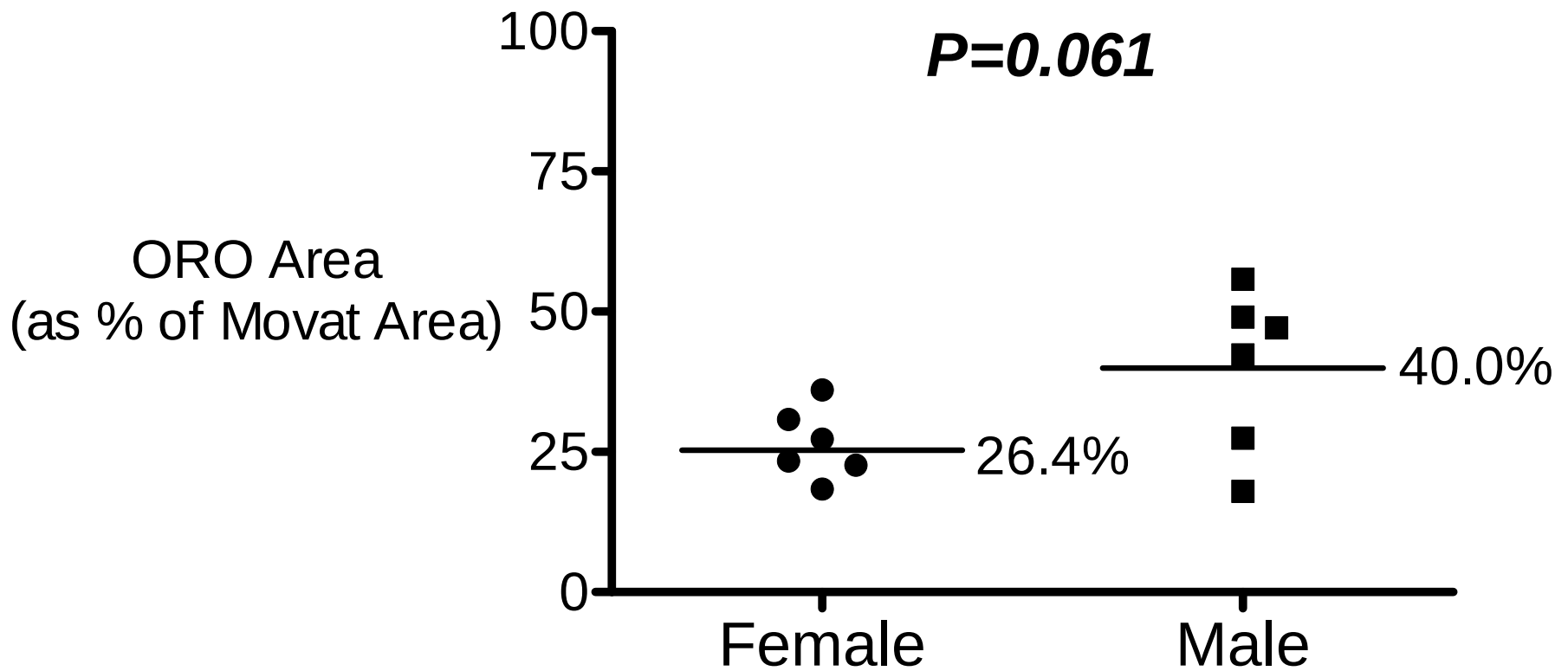


Correlation: ORO vs. Movat's Areas



ORO Area
(% of Movat's Area)

Oil Red O vs. Movat's: *Gender Difference?*



Aorta: Coronal Sectioning to Evaluate Multiple Arterial Branches



Macrophage



Collagen

Adipose Tissue, LDLR^{-/-} Mice:

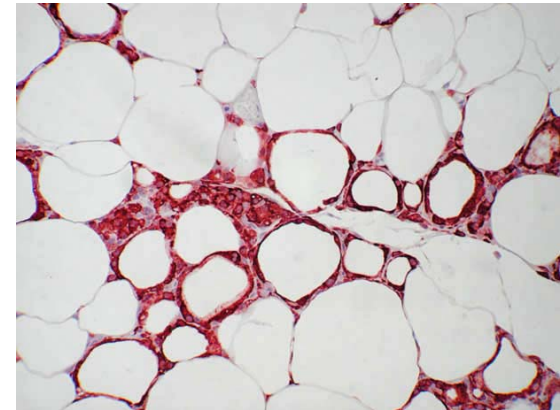
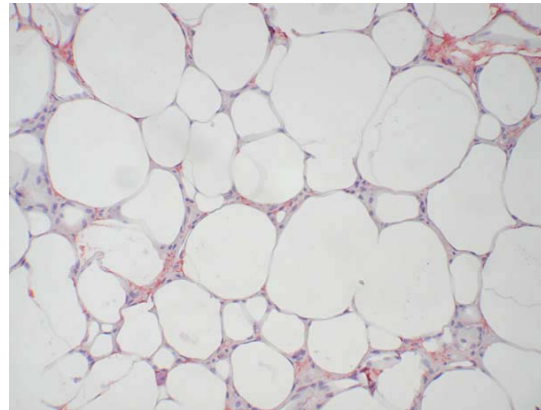
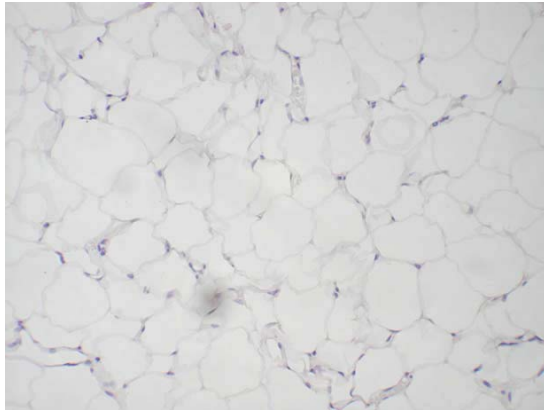
Macrophage Accumulation and Extracellular Matrix Expansion with Diabetogenic (“Surwit”) Diet

Chow

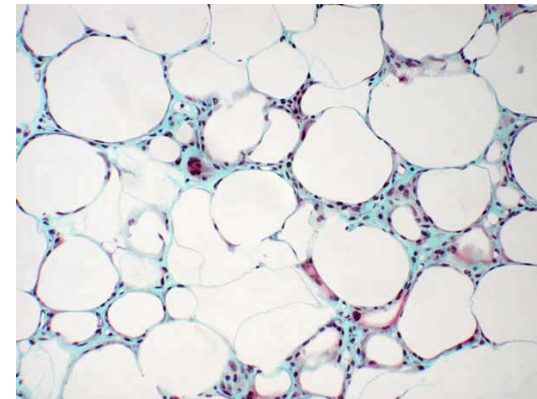
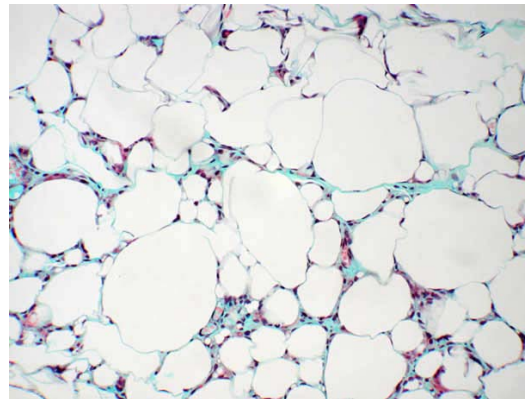
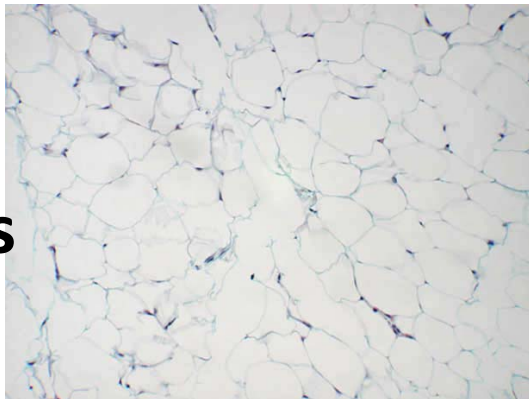
Surwit

Surwit+Chol

Mac-2



Movat's

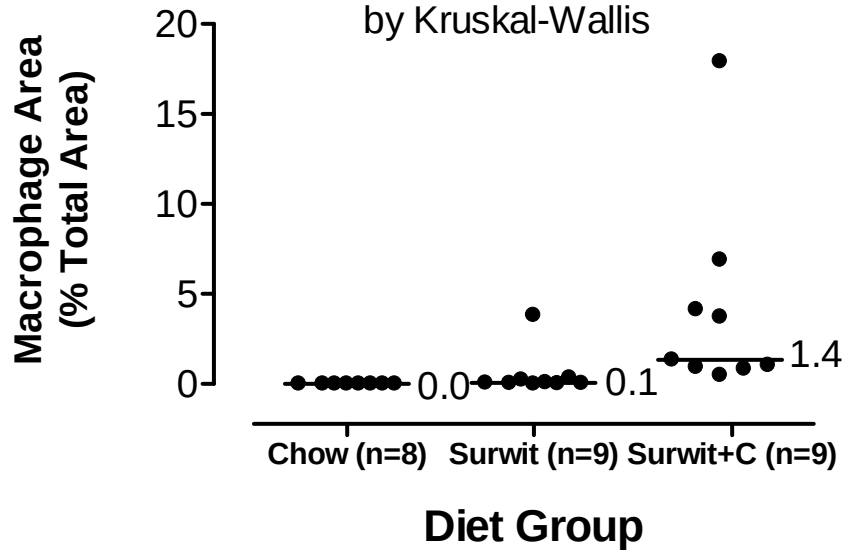


Adipose Tissue, LDLR-/- Mice:

Quantitative Assessment of Diet Effects on Macrophages and Extracellular Matrix

Macrophages

$P < 0.0001$
by Kruskal-Wallis



Stromal Vascular Area

$P = 0.0053$
by Kruskal-Wallis

