Applying laws of biology to diabetes with emphasis on metabolic syndrome

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A new model of disease is health exists when degeneration and regeneration are in balance. Inflammation is the fulcrum between the two, being both beneficial in repair and detrimental by promoting degeneration.

1. Insulin in excess (insulin resistance) is a proliferative hormone that promotes abdominal obesity, lipid infiltration of blood vessels, hypertension, and is a precursor to cardiovascular events.
2. Allostasis, the innate drive for energy storage, introduces noise into the metabolic control loops resulting in obesity, and inflammation from excess fat.
3. The microcosm of bacteria influenced by dietary intake mainly carbohydrates is one of the inflammatory triggers that promotes insulin resistance.

This model suggests a low inflammatory diet, exercise, and weight loss decreases the proliferative effects of insulin, increases circulating stem cells, and decreases inflammation to maintain health.

Biography
Philip D Houck, MD MSc is a Cardiologist and Associate Professor of Medicine Texas A&M University. Currently, he is working at Baylor Scott & White Healthcare. He started his academic career in Engineering Science at Penn State University and received an MSc in Biomedical Engineering and MD from Northwestern University. He has been retired from the Air Force serving at the Aerospace Medical Research Laboratory, School of Aerospace Medicine, and Wilford Hall Medical Center. His research interests includes weather and myocardial infarction, increasing circulating stem cells with EECP, electrical remodeling of the heart, peripartum immune disease, lymphatics role in decompensated heart failure, and fundamental laws of biology.

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