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Metabolic Modulators in Heart Disease – Past, Present and Future

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Summary: Changes in myocardial substrate preference contribute to energetic inefficiency, contractile dysfunction, and the severity of heart failure and ischemic heart disease. Pharmacological interventions that inhibit fatty acid oxidation and increase the coupling of glycolysis to glucose oxidation are potentially promising approaches to treating heart failure. Similarly, targeting ketone metabolism and/or branched chain amino acid metabolism may also hold promise as therapeutic approaches to treat ischemic heart disease and heart failure.

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