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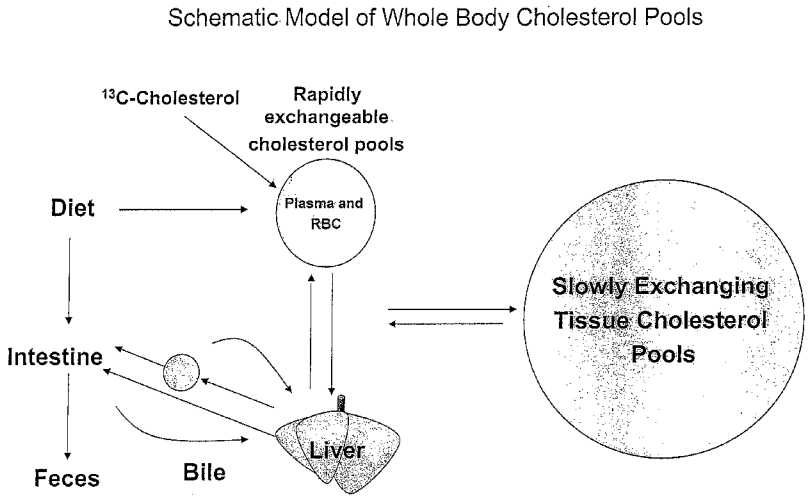
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(54) **Title:** METHODS FOR MEASURING CHOLESTEROL METABOLISM AND TRANSPORT



(57) **Abstract:** The present invention relates to biochemical methods for determining reverse cholesterol transport (RCT). Specifically, the three components of RCT (efflux, plasma, and excretion) are measured in vivo by administering an isotope-labeled cholesterol or cholesterol-related molecule or cholesterol-related complex, and then measuring the dilution or appearance of isotopes in the various cholesterol or cholesterol-related molecules or cholesterol-related complexes, as well as recovery in sterol end-products, that are part of RCT. A parameter of Global RCT flux, representing for the first time in living organisms that combined rate of cholesterol efflux from tissues into blood and excretion from blood out of the body, is generated. Such methods find use in drug discovery and development, diagnosis and prognosis of atherosclerosis and other blood vessel diseases and conditions, the selection of proper doses for treating disease, and selecting subjects for therapies targeting RCT flux.

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