



## Microbial Impact on Cholesterol and Bile Acid Metabolism

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### Message from the Guest Editor

The metabolism of cholesterol and bile acids by the gut microbiota represent processes important in both health and disease. The conversion of cholesterol to coprostanol by gut bacteria has been a challenging area of research for some time but promises to advance our ability to modulate serum cholesterol levels in the host. Bile acids are synthesized from cholesterol in the liver and function to solubilize cholesterol and other lipids in the small intestine. Bile acid metabolism by gut bacteria represents another microbial target for altering host cholesterol levels. In addition, bile acid biotransformations affect the microbiome structure, colonization by pathogens, host signaling through nuclear and G-protein-coupled receptors, and the risk for chronic diseases. The objective of this Special Issue of *Microorganisms* is to present the current understanding of the microbial biotransformations of bile acids and cholesterol and to describe how these processes affect microbial and host physiology, chronic disease, and infection by pathogenic bacteria and viruses.





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## Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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