



### 18 Aggression Is Inversely Related to Serum Cholesterol

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**Learning Overview:** After attending this presentation, attendees will understand the correlation between lower cholesterol and more aggressive behavior, which will be helpful in situations in which this correlation may be important.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by focusing on the knowledge and understanding of the subject of cholesterol levels and rates of violence. Attendees will broaden and deepen their knowledge of an important arm of the physiological chemistry that underlies human aggressive behavior, whether it is “accidental” or against self or others. This will make attendees better ethics consultants and expert witnesses. This presentation will advance the field of forensic behavioral science as well by further extending and strengthening the scope of potential new treatments for aggression as well as enhanced preventive measures.

Most clinicians across all fields of practice today would consider it a mark of thoroughness and even of excellence in their performance as practitioners when they do not omit checking their patients’ serum cholesterol, no matter what the purpose of the office visit may have been. Clinicians base this practice on the clinically demonstrated connection between control of cholesterol levels and good cardiovascular health. It is a clinical impression that enjoys a strong base in established theory.

At the same time, it is becoming gradually clear that another clinical correlation of well-controlled serum cholesterol concentration is likely to be in play. A growing number of observers are reporting associations between lowered cholesterol levels and increased serious violent behavior. This unexpected result naturally raises questions well worth answering through appropriate queries. Some would suggest that the finding is pure coincidence. Others consider the relationship likely to be merely an indirect one, that the actual operating factor happens to be linked to either the lowered cholesterol or to the increased aggression. Examples include an endocrine phenomenon or epiphenomenon, chemical or structural resemblances suggesting as they can significant functional relationships. This may come about through shared metabolic pathways that have varied status among different groups of investigators.

Unlike the connection of lower serum cholesterol with better cardiovascular health, the phenomenon of its correlation with more violent behavior currently lacks a widely accepted theoretical explanation. Such an absence is a matter of serious concern since the safety of innocent persons is at stake. Ethics expertise is of unusually serious importance since several of the competing values in this case are of such heavy weight. Also, they could turn out to be considerable in number, depending on the details of the investigation that might be proposed or on the clinical or legal decision to be made. In no particular order, the concerns or values may, among others, include beneficence, non-maleficence, autonomy, privacy, safety, and justice

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#### Cholesterol, Violence, Accidents