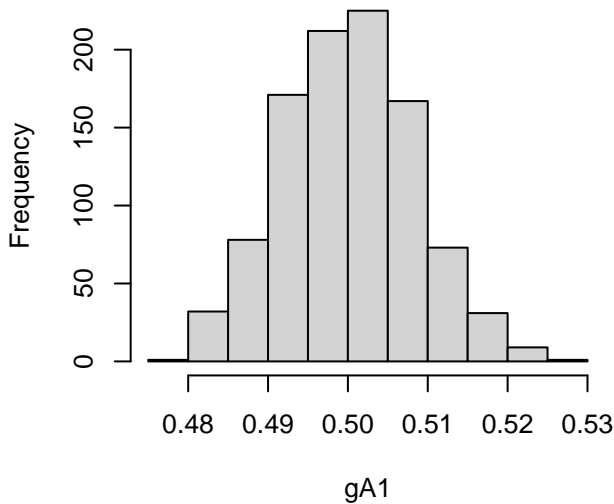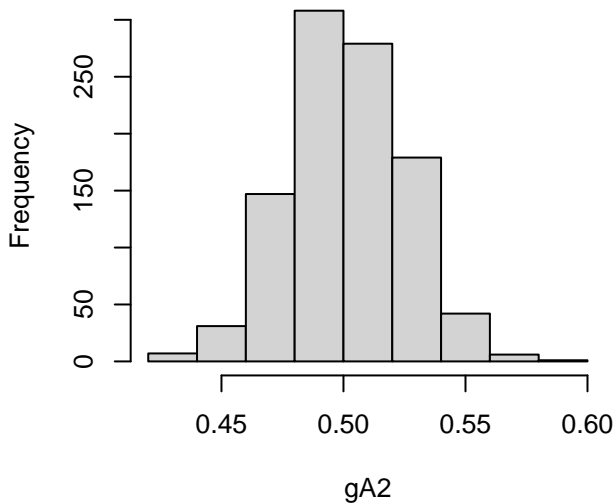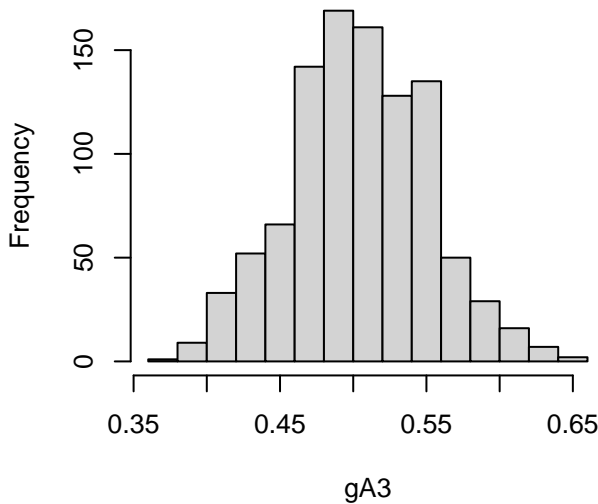**Prob A1 is observed, given past variables**  **Prob A2 is observed, given past variables**

**Prob A3 is observed, given past variables**  **Prob A4 is observed, given past variables**