

Supplementary Materials

Construction of risk prediction models for psoriasis based on 45 dietary nutrients using machine learning and SHAP analysis

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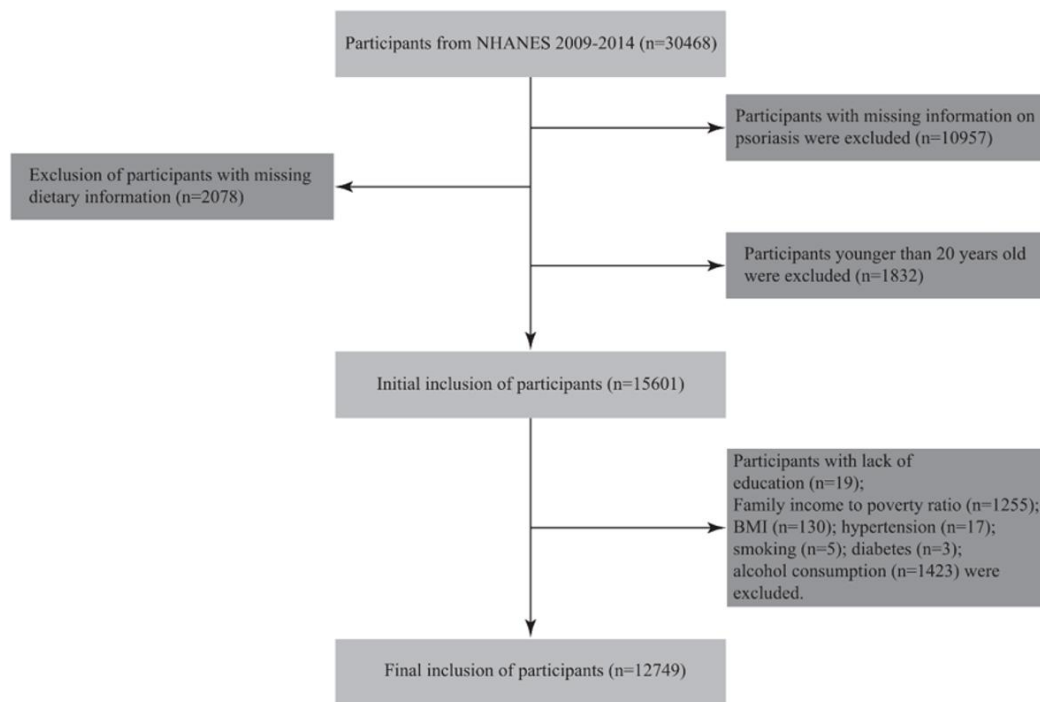
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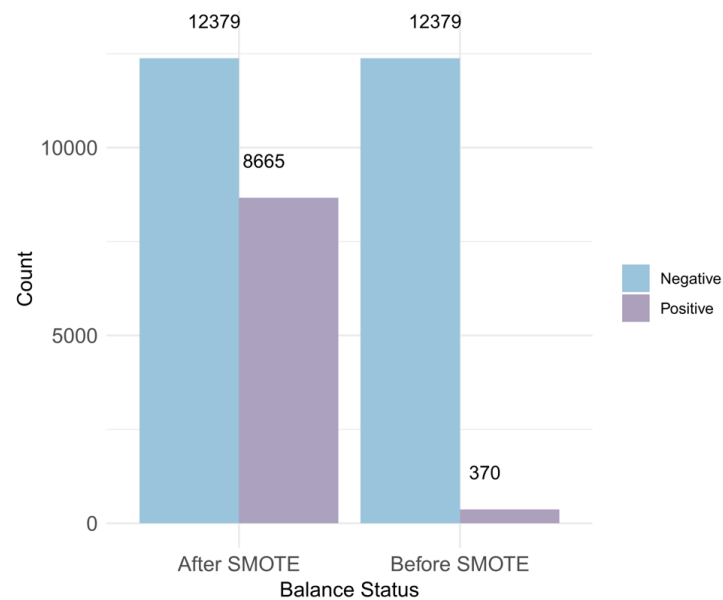
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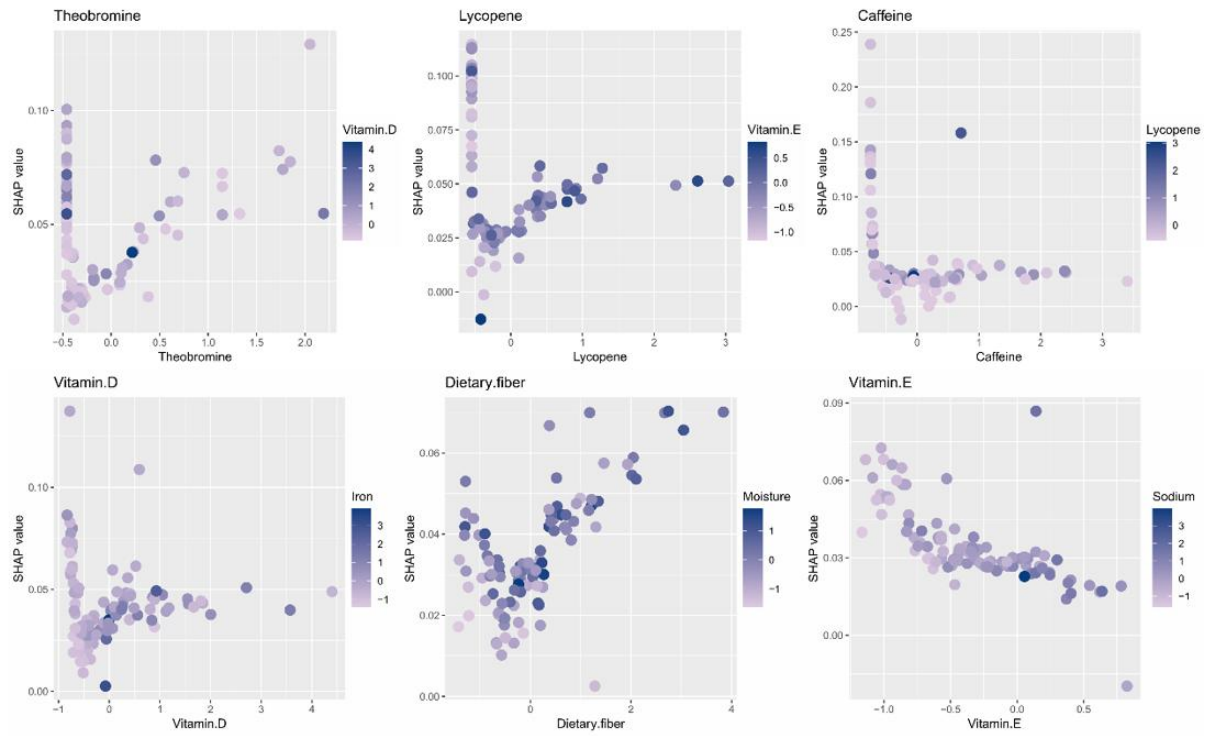
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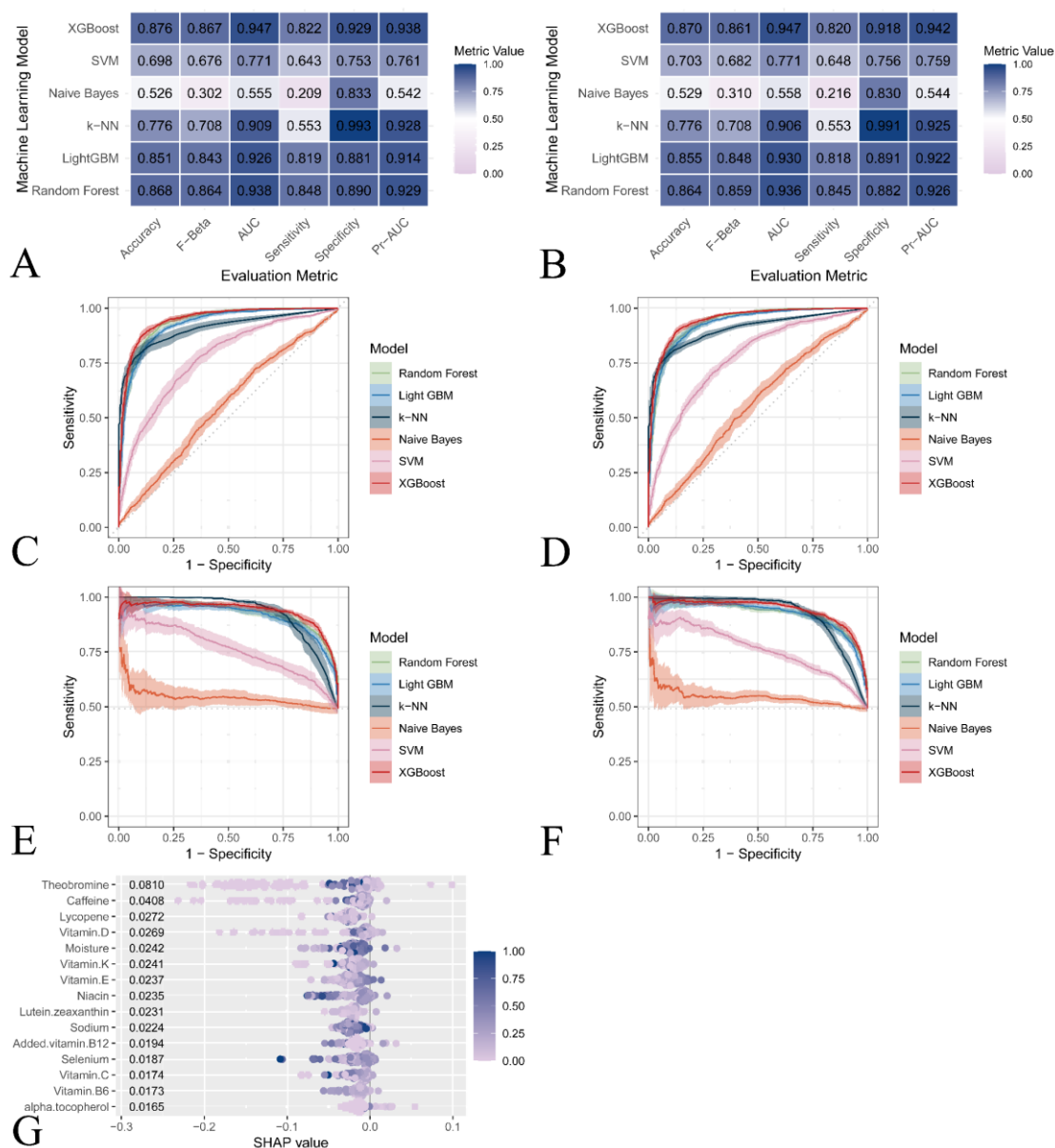
Supplementary Figure 1. The flow chart shows the study design and exclusion criteria



Supplementary Figure 2. SMOTE algorithm. The SMOTE algorithm is used to increase the number of minority samples to maintain data balance



Supplementary Figure 3. SHAP dependency plot. It shows the relationship between dietary antioxidants and SHAP values



Supplementary Figure 4. Performance comparison of six machine learning models without SMOTE processing and SHAP interpretation of the best-performing model. (A) Heatmap of model performance in the training set. (B) Heatmap of model performance in the validation set. (C) ROC curves in the training set. (D) ROC curves in the validation set. (E) Recall rates in the training set. (F) Recall rates in the validation set. (G) SHAP summary plot of the best-performing model