

The final ER diagram includes several key enhancements over the first design. In addition to refining attributes (such as adding Standard Batch Units in Product, On Hand Qty in Ingredient Batch, and Version No in Supplier Formulation) and improving clarity with required (R) and unique (U) field labels, a new table — Supplier Formulation Materials — was introduced. This table explicitly models the relationship between formulations and their component ingredients, improving normalization and traceability of supplier blends. Furthermore, the addition of the User entity further supports role and system management, making the design more complete, structured, and easier to maintain. Finally, recipe table was replaced with 2 new tables (RecipePlan and RecipeIngredient) to allow for version tracking of recipes.