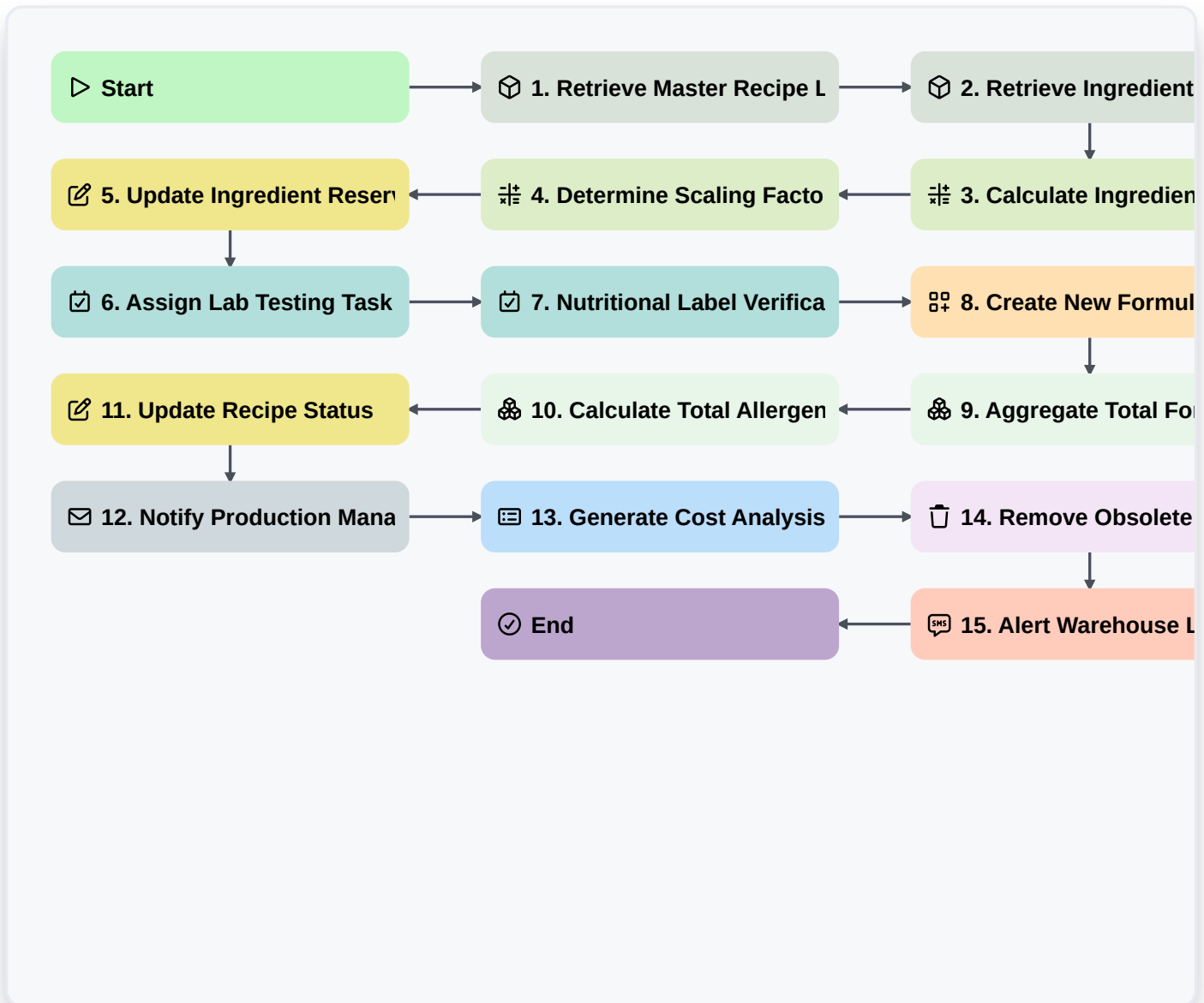


Formula Management And Recipe Control



▷ Start

Start of the Workflow/Process.

📦 1. Retrieve Master Recipe List

Fetch all active recipes from the Recipe Data Model to check for existing formulations.

📦 2. Retrieve Ingredient Inventory

Fetch current stock levels and specifications from the Ingredient Data Model.

🧮 3. Calculate Ingredient Costing

Calculate the total cost of the formula by multiplying ingredient quantities by their unit prices.

🧮 4. Determine Scaling Factor

Calculate the multiplier needed to scale the base formula to a target production volume.

📝 5. Update Ingredient Reservation

Update the 'Reserved Quantity' field in the Ingredient Data Model to account for the new formula requirement.

📝 6. Assign Lab Testing Task

Create a task for the Quality Control specialist to perform chemical stability testing on the new formula.



7. Nutritional Label Verification

Create a task for the regulatory compliance officer to review the calculated nutritional values.

8. Create New Formula Entry

Generate a new record in the Formula Data Model with the finalized composition and version number.

9. Aggregate Total Formula Weight

Sum the weights of all ingredients in the current formula to ensure the total mass is correct.

10. Calculate Total Allergen Count

Count the number of unique allergen-tagged ingredients present in the recipe.

11. Update Recipe Status

Change the status of the Recipe entry from 'Draft' to 'Under Review'.

12. Notify Production Manager

Send an email to the Production Manager stating that a new recipe is ready for pilot testing.

13. Generate Cost Analysis Report

Create a detailed report comparing the cost of the new formula against the previous version's cost.

14. Remove Obsolete Version

Delete the temporary draft entry from the formulation workspace after the final version is saved.

15. Alert Warehouse Lead

Send an SMS to the Warehouse Lead if the formula requires an immediate restock of critical ingredients.

End

End of the Workflow/Process.