JavaScript Concepts Covered in the Calorie Counter Project

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JavaScript Fundamentals

- Variables (const, let)
- Functions (declaration and usage)
- Function parameters and return values
- Conditionals (if, ternary operator ? :)
- Loops (for...of)
- Basic operators (+, -, etc.)
- Boolean logic (true, false, !)

DOM (Document Object Model) Manipulation

- document.getElementById() / querySelector() / querySelectorAll()
- Accessing and modifying input values
- Changing innerHTML / innerText
- Dynamically inserting HTML (insertAdjacentHTML)
- Modifying classes (classList.add/remove)
- Showing and hiding elements
- Looping through DOM elements

Event Handling

- addEventListener() for clicks and form submission
- Form submission handling (submit event)
- Preventing default form behavior (e.preventDefault())

Data Validation

- Custom input cleaning (cleanInputString)
- Regex usage (replace(), match() with /\d+e\d+/)
- Alert for invalid input

Modular Thinking / Code Organization

- Breaking code into smaller helper functions:
  - addEntry()
  - calculateCalories()
  - getCaloriesFromInputs()
  - cleanInputString()
  - isInvalidInput()
  - clearForm()

Basic Arithmetic and Logic

- Calculating:
  - Total consumed calories
  - Remaining calories
  - Surplus or deficit using conditionals and Math.abs()

Minimal Styling Logic (Class Toggle)

- Conditional class changes based on result (e.g., 'surplus' or 'deficit')

Bonus Concepts You'll Use When Adding Field Removal

- Event delegation (if you use one listener for multiple dynamic buttons)

- remove() method

- Creating elements with createElement

- Adding buttons dynamically with events attached

This is a solid beginner-to-intermediate JavaScript project that prepares you for real-world interactive forms and data handling in web apps.