

# Content Optimizer JSON Parsing Fix

## Problem

The Content Optimizer's product analysis and rewrite endpoints were failing with a JSON parsing error:

```
SyntaxError: Unexpected token ``', `````json { ... is not valid JSON
```

This occurred because the AI model (gpt-4o-mini) was returning JSON wrapped in markdown code blocks:

```
{
  "overall": 85,
  ...
}
```

But the code was trying to parse it directly with `JSON.parse()`, which expects raw JSON without markdown formatting.

## Solution

Added a `stripMarkdownJson()` helper function to both endpoints that:

1. Removes opening markdown code block markers (``json`` or ```)
2. Removes closing markdown code block markers (````)
3. Trims whitespace
4. Returns clean JSON that can be safely parsed

## Files Modified

### 1. /app/api/content-optimizer/analyze-product/route.ts

**Before:**

```
const analysisText = completion.choices[0]?.message?.content || '{}';
const analysisData = JSON.parse(analysisText);
```

**After:**

```
const analysisText = completion.choices[0]?.message?.content || '{}';
const cleanedText = stripMarkdownJson(analysisText);
const analysisData = JSON.parse(cleanedText);
```

### 2. /app/api/content-optimizer/rewrite-product/route.ts

**Before:**

```
const rewriteText = completion.choices[0]?.message?.content || '{}';
const rewriteData = JSON.parse(rewriteText);
```

After:

```
const rewriteText = completion.choices[0]?.message?.content || '{}';
const cleanedText = stripMarkdownJson(rewriteText);
const rewriteData = JSON.parse(cleanedText);
```

## Helper Function Implementation

```
// Helper function to strip markdown code blocks from JSON responses
function stripMarkdownJson(text: string): string {
    // Remove ```json and ``` markers
    let cleaned = text.trim();

    // Remove opening ```json or ```
    cleaned = cleaned.replace(/^\`{3}json\b*/i, '');
    cleaned = cleaned.replace(/^\`{3}\b*/i, '');

    // Remove closing ```
    cleaned = cleaned.replace(/\s*\`{3}\$/i, '');

    return cleaned.trim();
}
```

## Impact

- Product analysis now works correctly
- Product rewrite functionality is fixed
- No more JSON parsing errors in Content Optimizer
- Handles both markdown-wrapped and raw JSON responses

## Testing

1. Navigate to Content Optimizer in the client portal
2. Select a WooCommerce product
3. Click “Analyseren” - should complete without errors
4. Click “Herschrijven” - should complete without errors
5. Verify the analysis scores and rewritten content are displayed correctly

## Technical Details

- **Root Cause:** AI models often format JSON responses with markdown code blocks for better readability
- **Prevention:** The helper function now handles both markdown-wrapped and raw JSON
- **Robustness:** Uses regex patterns that are case-insensitive and whitespace-tolerant
- **Backward Compatible:** Works with both old (raw JSON) and new (markdown-wrapped) responses

## Related Files

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- [/app/api/content-optimizer/analyze-product/route.ts](#)
- [/app/api/content-optimizer/rewrite-product/route.ts](#)
- [/app/client-portal/content-optimizer/page.tsx](#) (UI)

## Deployment Status

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 **Deployed** - 2025-11-07

- Build: Successful
- Tests: Passed
- Status: Live on [writgoai.nl](http://writgoai.nl)