

MEMORANDUM

February 14, 1973

TO: MR. J.W. BURGARD

cc: Mr. E.P. Finch
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WR #1972-84

FINAL REPORT

WOODROSE IMPACT IRRITATION AND FLAVOR AMPLITUDE

EVALUATION OF THE FOLLOWING COMPETITIVE BRANDS:

L&M 85, Marlboro Lights, Tareyton 100, and Winston 85

MANUFACTURED OCTOBER 1972 AND MARLBORO 85 MANUFACTURED SEPTEMBER 1972

(WR #1972-84)

REVISION #1

Background

In a continuing effort to update Woodrose impact, irritation, and flavor amplitude information on selected competitive brands, the following five cigarettes have been evaluated by the Woodrose Panel:

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Brand	Month of Manufacture
L&M 85	October, 1972
Marlboro Lights	October, 1972
Marlboro 85	September, 1972
Winston 85	October, 1972
Tareyton 100	October, 1972

Random samples of each brand were obtained for Woodrose evaluation, from R&D's routine competitive brand pick up.

Ratings obtained on the current samples will be compared to the latest ratings available on these brands.

Conclusions

1. The current ratings obtained on L&M 85 and Marlboro Lights, show that they have not changed significantly in impact, irritation or flavor amplitude characteristics. However, Marlboro Lights show a directional increase in impact and nose irritation.
2. Marlboro 85 and Winston 85 have increased significantly in impact since their previous evaluation. Marlboro 85 also shows significant increases in throat irritation and flavor amplitude and a directional increase in mouth irritation. Winston, in addition to having significantly increased impact, also has significantly increased nose irritation, directionally increased throat irritation and directionally decreased flavor amplitude.
3. Current ratings on Tareyton 100 show that the brand has increased significantly in throat and nose irritation, and directionally in impact and flavor amplitude.

Findings

Brand Mo. of Mfg.	IMPACT-IRRITATION-FLAVOR AMPLITUDE RATINGS*									
	L&M 85		Marlboro Lights		Marlboro 85		Winston 85		Tareyton 100	
	10/72	10/72	4/72	10/72	7/72	9/72	8/72	10/72	4/72	10/72
Impact	2.2	2.2	1.8	2.0	1.9	2.3	1.6	2.4	1.8	2.0
(Irritation)										
Mouth	1.0	0.9	0.9	0.8	0.7	0.9	1.0	1.0	0.8	0.9
Throat	1.7	1.6	1.3	1.4	1.3	1.6	1.5	1.7	1.3	1.6
Nose	2.0	1.9	1.5	1.7	1.7	1.8	1.6	1.9	1.5	1.8
Flavor Amplitude	2.6	2.6	2.3	2.4	2.5	2.8	2.7	2.5	2.3	2.5

*A difference of 0.3 between ratings is required for statistical significance, also areas showing significant difference have been underlined.

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Discussion

The current ratings obtained on L&M 85 and Marlboro Lights show that no significant changes have occurred in their impact, irritation and flavor amplitude characteristics since their previous evaluation. However, the current ratings do show that Marlboro Lights has increased directionally in impact and nose irritation.

Marlboro 85 and Winston 85 both show significant increases in impact intensity. In addition, Marlboro 85 has significantly increased throat irritation and flavor amplitude and directionally increased mouth irritation. Winston 85, in addition to having significantly increased impact, also shows a significant increase in nose irritation, a directional increase in throat irritation and a directional decrease in flavor amplitude.

The current ratings on Tareyton 100 show that the brand has significantly increased throat and nose irritation, and directionally increased impact and flavor amplitude.

R&D data on the five brands evaluated are attached.

W. L. Wright
W. L. Wright

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R&D DATA

Brand	<u>L&M 85</u>		<u>Marlboro Lights</u>		<u>Marlboro 85</u>		<u>Winston 85</u>		<u>Tareyton 100</u>	
Month of Mfg.	<u>10/71</u>	<u>10/72</u>	<u>4/72</u>	<u>10/72</u>	<u>8/72</u>	<u>9/72</u>	<u>8/72</u>	<u>10/72</u>	<u>4/72</u>	<u>10/72</u>
Tar (mgs/cig)	17.8	18.3	14.1	13.8	18.0	16.9	19.6	20.2	19.6	20.6
Nicotine (mgs/cig)	1.45	1.44	1.15	0.99	1.36	1.27	1.45	1.40	1.39	1.44
Puffs (#)	7.7	8.5	8.0	8.1	8.6	8.7	9.1	9.1	10.1	11.0
Pressure Drop (")										
Cigarette	4.2	4.3	3.7	3.8	4.5	4.5	4.9	4.6	4.4	4.5
Tobacco Section	1.9	1.9	1.6	1.5	1.9	1.6	2.3	2.2	2.8	2.6
Filter	2.3	2.4	2.1	2.3	2.6	2.9	2.6	2.4	1.6	1.9
Density (mgs/cc)	250	245	260	259	259	261	260	258	253	258
Conditioned										
Moisture (%)	11.4	11.8	13.5	13.5	12.2	12.8	12.8	12.6	12.2	12.0

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