

FROM

RESEARCH AND DEVELOPMENT ESTABLISHMENT
BRITISH-AMERICAN TOBACCO COMPANY, LIMITED
REGENTS PARK ROAD, MILLBROOK, SOUTHAMPTON

DGF/EMK/62

23rd September, 1960

TO

D. S. F. Hobson, Esq.,
MILLBANK.

D. S. F. H.
23 SEP 1960

Dear Mr. Hobson,

SYNTHOS

We have now completed the experiments on the transfer of SYNTHOS from packing material to tobacco which you asked for in the early weeks of August. I enclose a copy of the report made by Dr. Cora Ayers, who carried out the work.

This report is largely self-explanatory, but I would call your attention to a number of subsidiary points not dealt with in detail in the report.

The maximum rate of application of SYNTHOS was 3 mg. per packet of twenty cigarettes, that is a rate of 0.015% on the weight of tobacco in the packet. This quantity was applied in two ways:-

- (a) to the tissue of the bonded foil and tissue wrapped around the cigarettes. A lower level of 1 mg. per packet (0.005% SYNTHOS on tobacco) was also studied in this way.
- (b) to the paper cup pack surrounding the foil wrapped cigarettes. A lower level was not used in this experiment, since it was hoped that there would be no transfer to the tobacco at the higher level.

In all cases the treated cigarettes were wrapped in viscose and then stored at room temperature for varying lengths of time. In every case, a control experiment was made using normal RALEIGH cigarettes which did not contain SYNTHOS in either the casing or flavouring applied during manufacture.

The table of results in the report shows that no SYNTHOS is transferred from the outer paper cup to the tobacco in the cigarettes. However, there is a steady loss of SYNTHOS through the viscose wrap. In the case of cigarettes packed in treated foil and tissue, the SYNTHOS is completely

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transferred to the tobacco in one month and is very largely transferred in as short an interval as one week.

As a check on the accuracy of the estimation, which is a long and tedious method, I list the sum of SYNTHOS detected on tobacco and on packet and compare it with the amount added.

<u>Time of storage</u>	<u>Packet treated</u>	<u>Amount added</u> <u>mg. per pkt.</u>	<u>Total Amount of SYNTHOS</u> <u>detected (mg.)</u>
1 week	Tissue of foil	1	0.9
1 week	Tissue of foil	3	2.9
1 week	Paper	3	2.8
2 weeks	Tissue of foil	1	1.05
2 weeks	Tissue of foil	3	2.7
2 weeks	Paper	3	2.4
4 weeks	Tissue of foil	1	1.0
4 weeks	Tissue of foil	3	3.0
4 weeks	Paper	3	1.0

Under separate cover, and packed separately so as to reduce transfer between the various packs, I enclose the following samples:-

1. RALEIGH cigarettes as control
2. Cigarettes treated with 1 mg. SYNTHOS on foil and tissue
3. Cigarettes treated with 3 mg. SYNTHOS on foil and tissue
4. Cigarettes treated with 3 mg. SYNTHOS applied to outer cup pack.

On examination of these, I think you will agree that the sample with the treated outer paper cup still has an appreciable impact aroma on opening the pack, even though much of the SYNTHOS has already escaped through the viscose wrap. On smoking the cigarettes in the packet, I think you will find that SYNTHOS is absent from the tobacco. In sending these samples, I would point out that the senses of smell and taste for SYNTHOS are rapidly fatigued and, therefore, an odour which is quite

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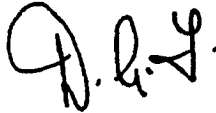
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apparent at the beginning, may seem to disappear^{owing} to sensory fatigue.

I trust you will find the results and samples of interest.

Yours sincerely,



D. G. FELTON

c.c. H.D. Anderson, Esq.

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