

## THE SCIENCE OF HAIR CONTAINMENT



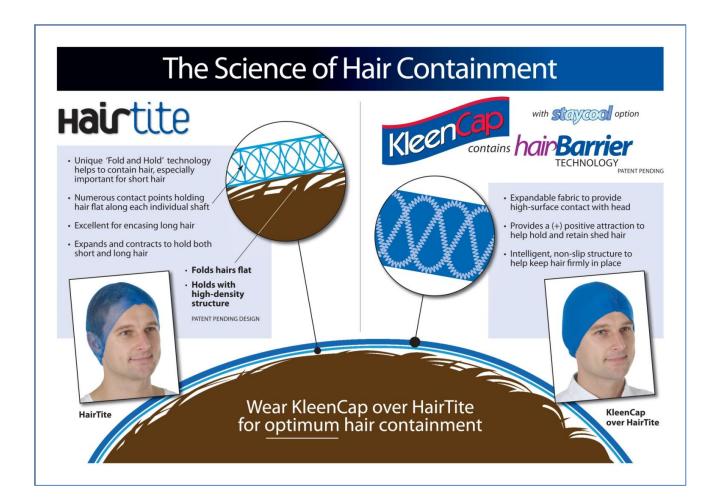


Independent Research by University of Bolton, funded by ABurnet Ltd

16 month research project into hair containment resulted in both **Hair like** and **hair Barrier** technology being developed by ABurnet to achieve an 11 fold improvement in hair containment.

## WHAT'S REQUIRED?

- An under layer to 'fold and hold' hair
- As short hairs are twice as likely to protrude through head coverings due to mechanical forces applied when scratching and adjusting headwear, it was found to be particularly important to fold shorts hairs to enhance containment.
- An outer covering is needed to have a high surface contact area with the whole head of hair as well as work to hold protruding and shed hairs, helping to prevent them escaping into the food being produced.



From University wearer trials, HairTite and HairBarrier technologies demonstrated an **11 fold improvement** in hair containment when compared to a mob cap worn alone. In addition, the HairBarrier technology works to help retain the few inevitable remaining hairs.

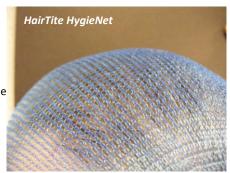
Head Covering(s)		University of Bolton Findings				Additional Hair Containment Technology		
Under	Outer	Actual Avg Qty Protruding Hairs Per Use	Factored Avg Qty Protruding Hairs Per Use *	Hair Containment Improvement Factor	Short Hair Protruding Over Long Hair Multiplier	Hairtite  Technology **	hair <b>Barrier</b> Technology **	<b>StayCoo</b> Technology
None	12 GSM Mob Cap	74*	85	0.0	2.3	X	X	X
None	KleenCap Standard	35	35	2.4	2.0	X	✓	Х
HairTite Standard	12 GSM Mob Cap	21	21	4.0	1.6	✓	Х	Х
HairTite Standard	KleenCap Standard	20	20	4.3	1.7	✓	✓	X
HairTite HiCare	12 GSM Mob Cap	15	15	5.7	1.8	<b>/</b> /	X	X
HairTite HiCare	KleenCap Standard	15	15	5.7	1.7	<b>//</b>	✓	X
HairTite Standard	KleenCap- Max	11	11	7.7	1.6	✓	<b>//</b>	✓
HairTite HiCare	KleenCap- Max	8	8	10.6	1.6	<b>√</b> √	<b>//</b>	✓

## \*\*HairTite and HairBarrier technologies help hold protruding hairs

<sup>\*</sup> Note: Where mob caps ballooned away from the head, protruding hairs could not be accurately counted. The University therefore factored the figure to account for the percentage of the head zones where the mob cap ballooned away from the head.



Photographs courtesy of International Food Hygiene Magazine





Mob Cap balloons away from head with no hair containment



Kleen Cap has high surface contact area to the head and works to hold shed hairs by

- 1. Positive attraction,
- 2. Non –slip and
- 3. Gripping features

According to Professor Subhash Anand, MBE, Professor of Technical Textiles, Institute for Materials Research and Innovation, University of Bolton, England, "nonwoven materials such as those used in mob and bouffant caps should not be used as a hair barrier fabric. Due to the nonwoven manufacturing methods of spinning the fibres, it is impossible to control the alignment and spacing of the fibres leading to a variable fabric structure with inherent gaps and different densities, allowing hairs to protrude through. Due to the fabric's rigidity, it will neither hold the head of hair nor grip strands of hairs that protrude through the fabric. It is a totally unsuitable material. This is evidenced in our wearer trials which proved that mob caps are the worst form of hair containment caps currently used in the UK food processing industry."

## Did you know....

Only 4 fines per week at £50 costs your company £10,400 PA!

What is the cost to your company of hair contaminates per month in terms of fines, management time, customer relationships and brand integrity?

Use ABurnet's hair containment products with FREE hair Barrier tools to



both improve hair containment and save your company money!

Contact your Distributor now, or visit www.aburnet.co.uk/register



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