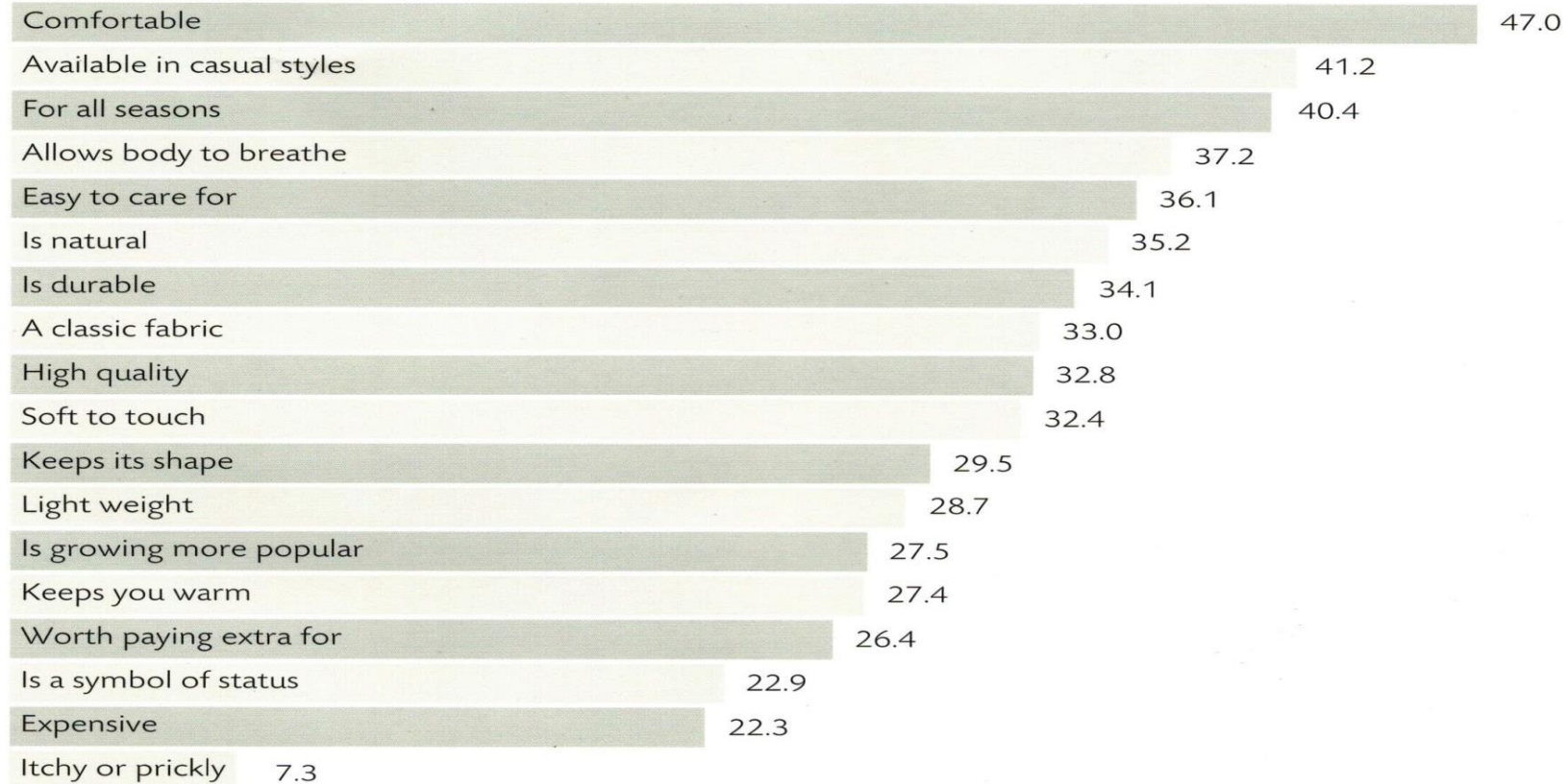




Performance by natural fibres

Factors influencing fabric purchasing decisions

Consumer research results below:



Comfort is the most important factor in consumers choice of fabric

Cotton: a symbol of Comfort

Cotton is the most used Natural Fibre in the Textile world

- Every year 20 ~ 25 millions tons (55 billions pounds) of raw cotton being cropped
- Cotton has been used by human being for centuries
- Cotton fiber morphological structure, makes fabrics soft, good in water absorbency, fluffy and warm



Tradition vs Innovation

Synthetic fibres are promoted as innovative, creative, functional

100% Polyester



Cotton is often related to classic conventional, traditional

100% Cotton

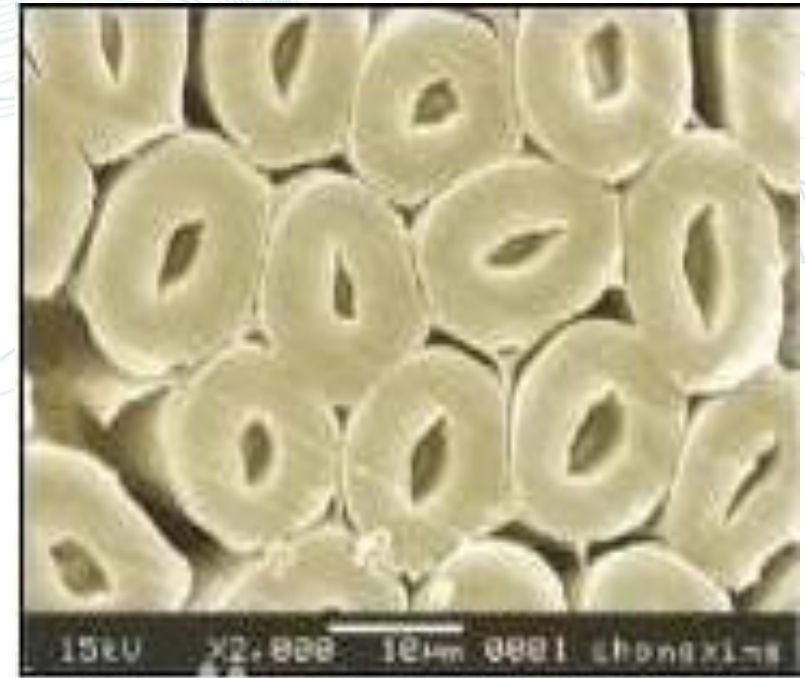


Synthetic fibres: inspired by Cotton

Synthetic fibers are trying to copy natural fibers



Researchers developed the hollow polyester filament, staple fibre from cotton hollow structure, as well as morphological structure

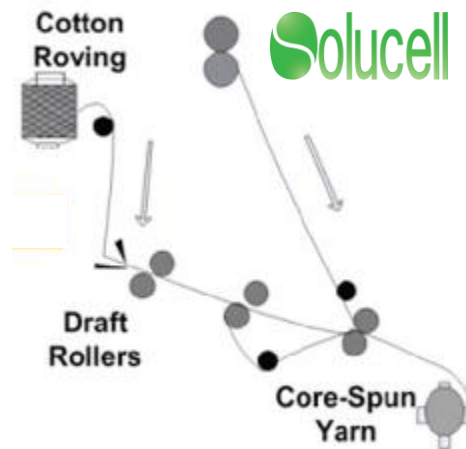
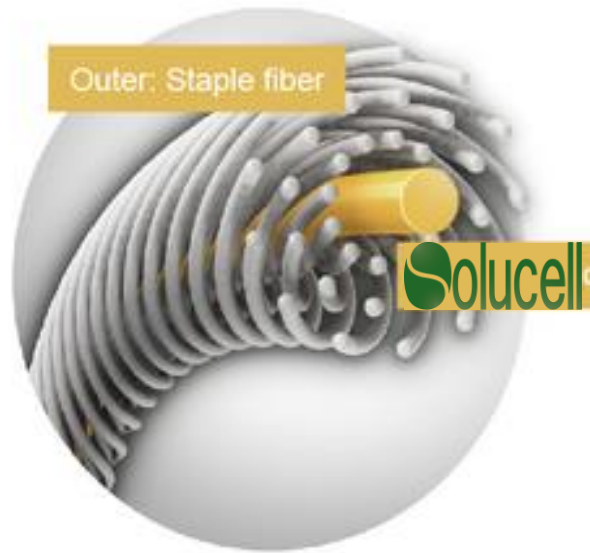


Despite the functions given by synthetics, deep in people's mind, they have always identified cotton as a symbol of comfort.

Why don't let the natural comfort of Cotton meet additional functions and change the concept of Cotton itself?

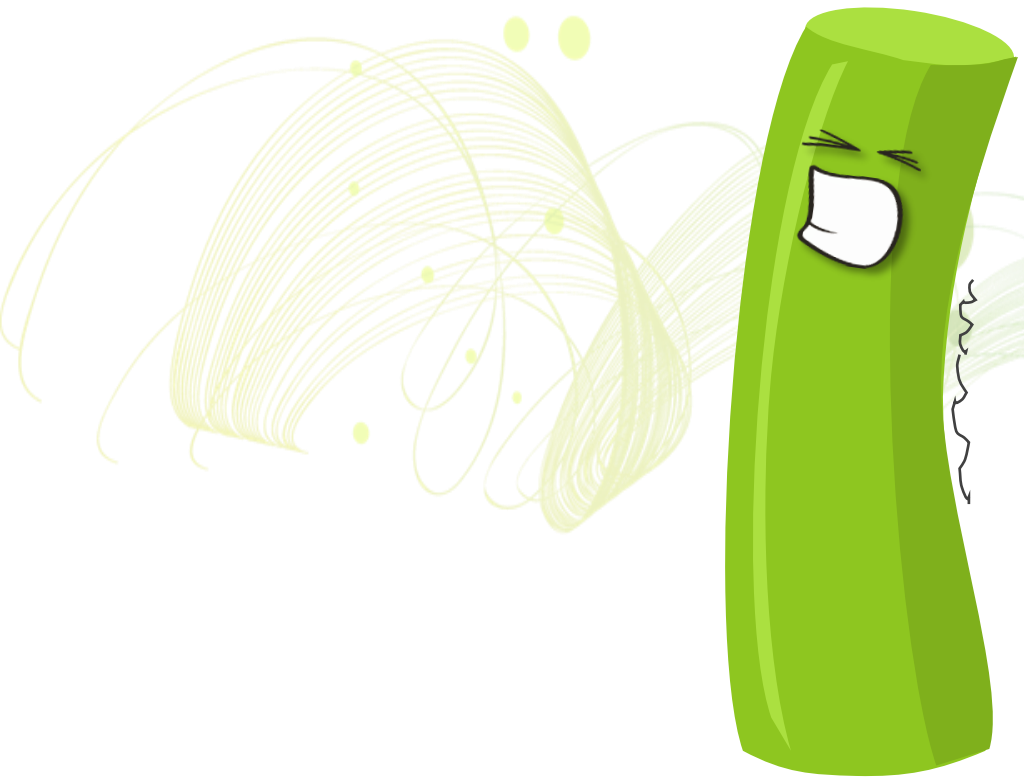
SolucellAir – A Yarn Technology

SolucellAir – An innovative yarn technology to create hollow core cotton yarn



SolucellAir Cotton - Features

SOFT



**Regular
Cotton**



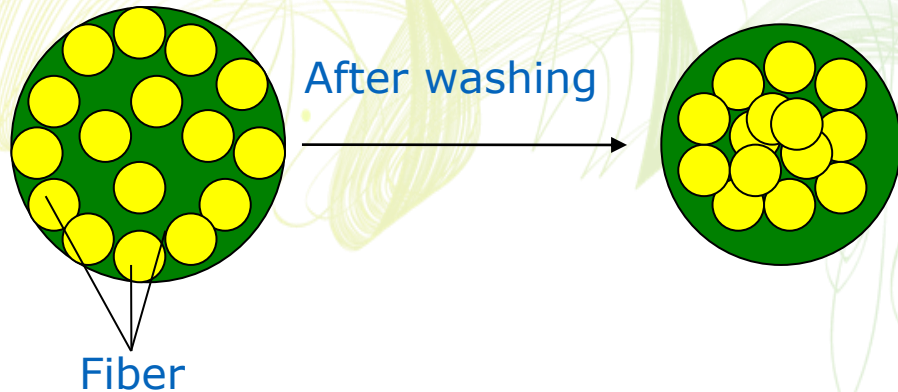
**Hollow
Cotton**

Touch: Soft feeling over time

Ordinary Cotton

After several times washing, the twist urge fibers to translate to the center and makes the yarns tighter. The fabric becomes harder and harder.

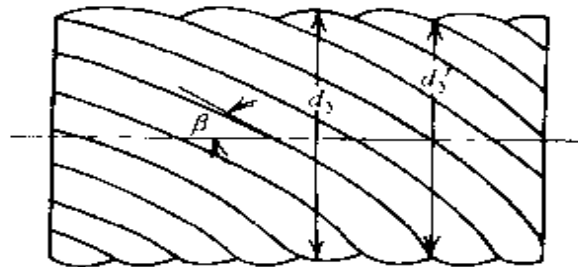
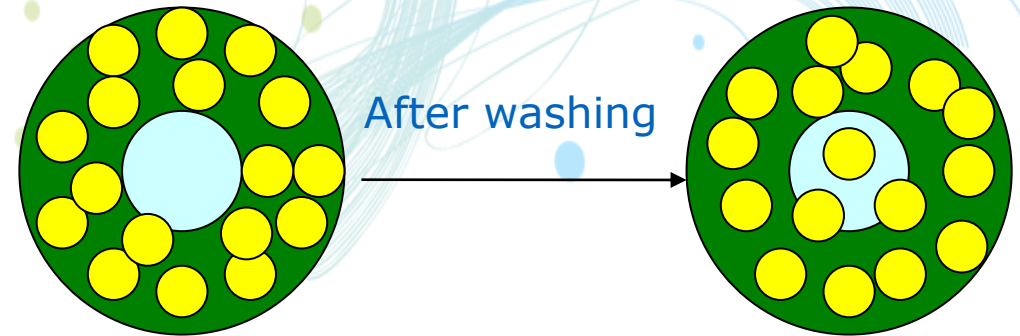
Ordinary yarn section



SolucellAir Cotton

The hollow part in the yarn provides fiber's larger space to move. The fabric maintains soft and fluffy even after repeated washing.

Hollow yarn section

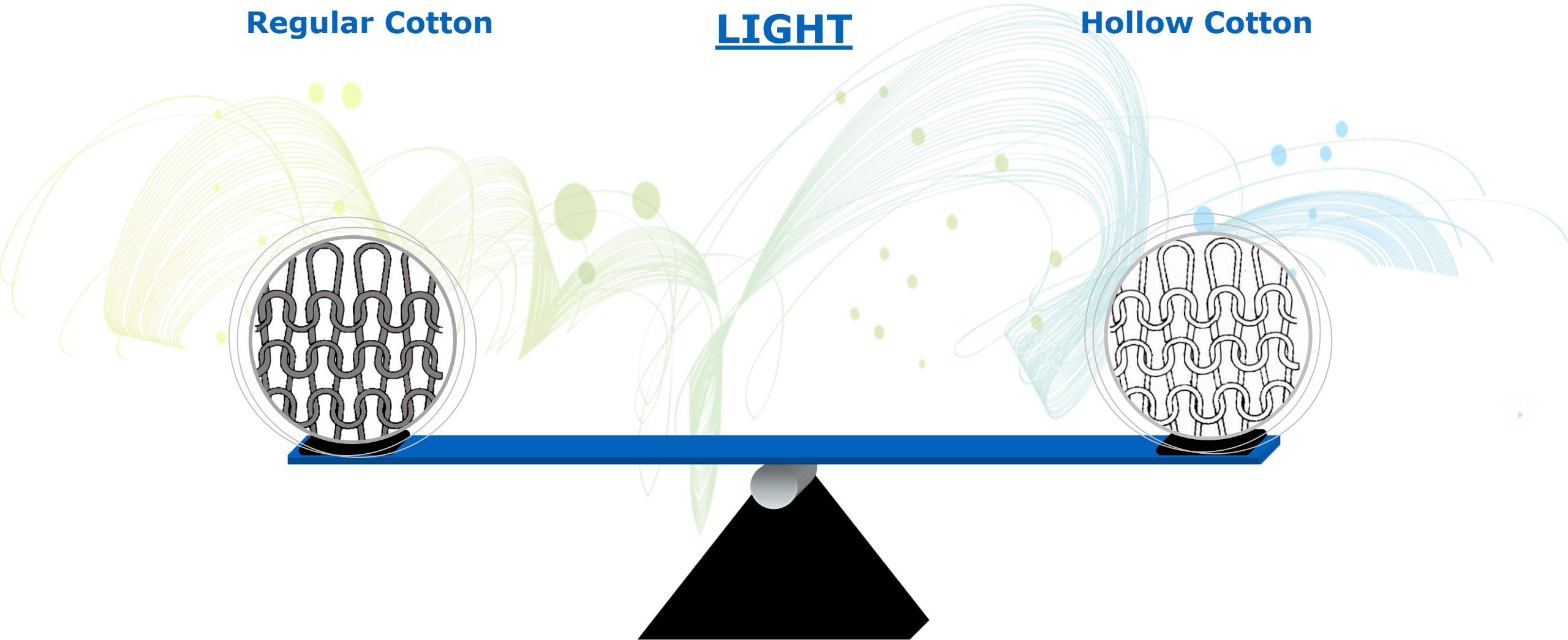


SolucellAir Cotton - Features

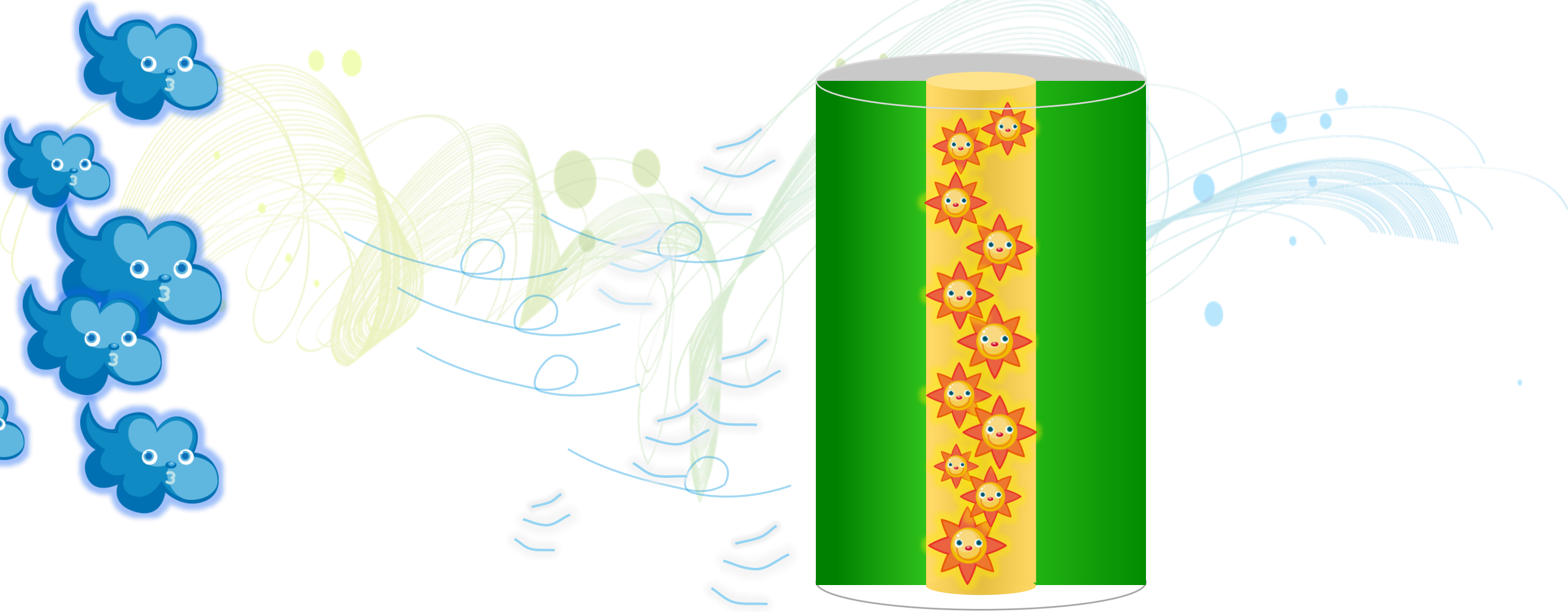
Regular Cotton

LIGHT

Hollow Cotton



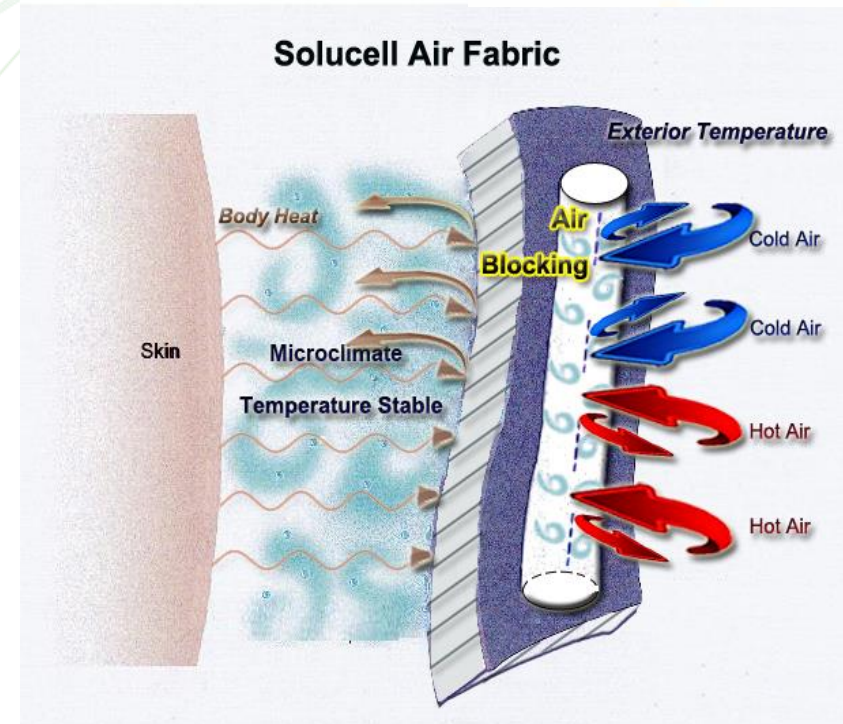
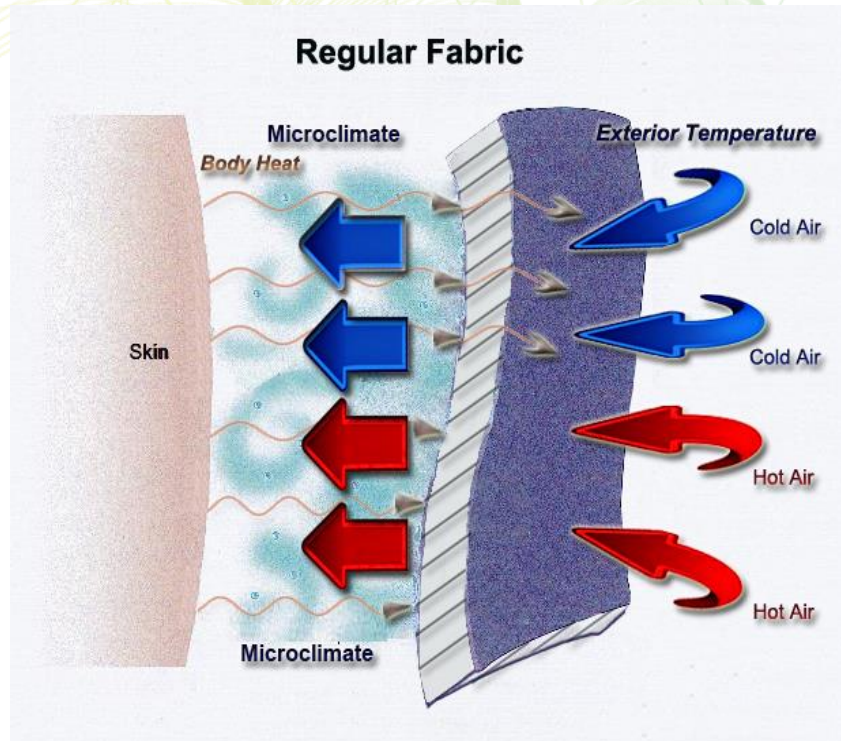
THERMOREGULATION



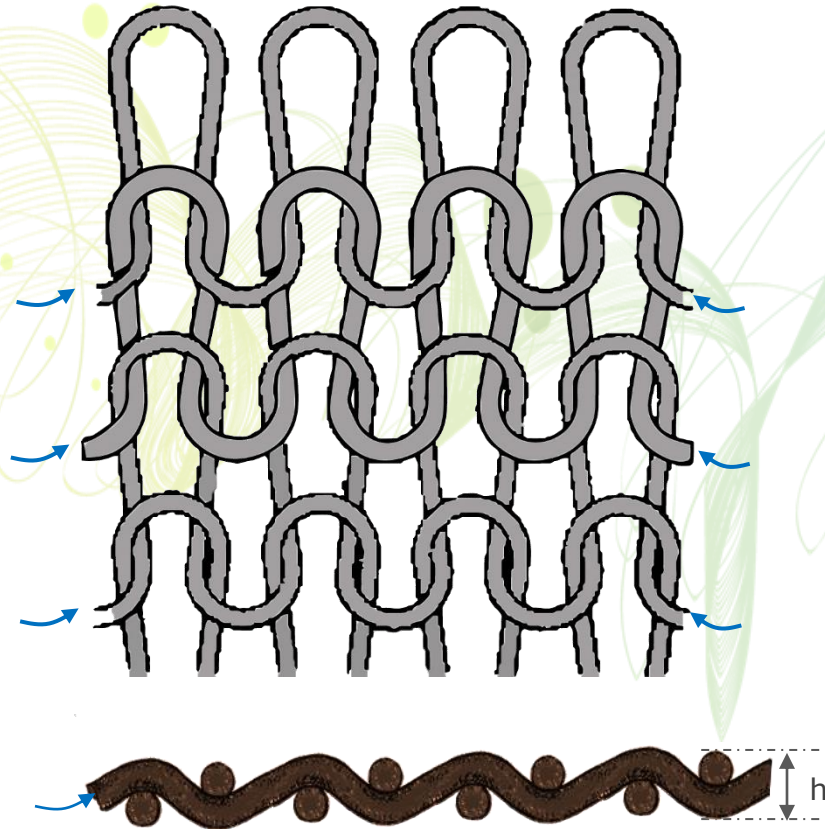
SolucellAir Cotton – Thermoregulation Mechanism

SolucellAir fabrics use static air to improve the thermal performance of regular cotton by constructing fabrics with improved CLO per unit weight

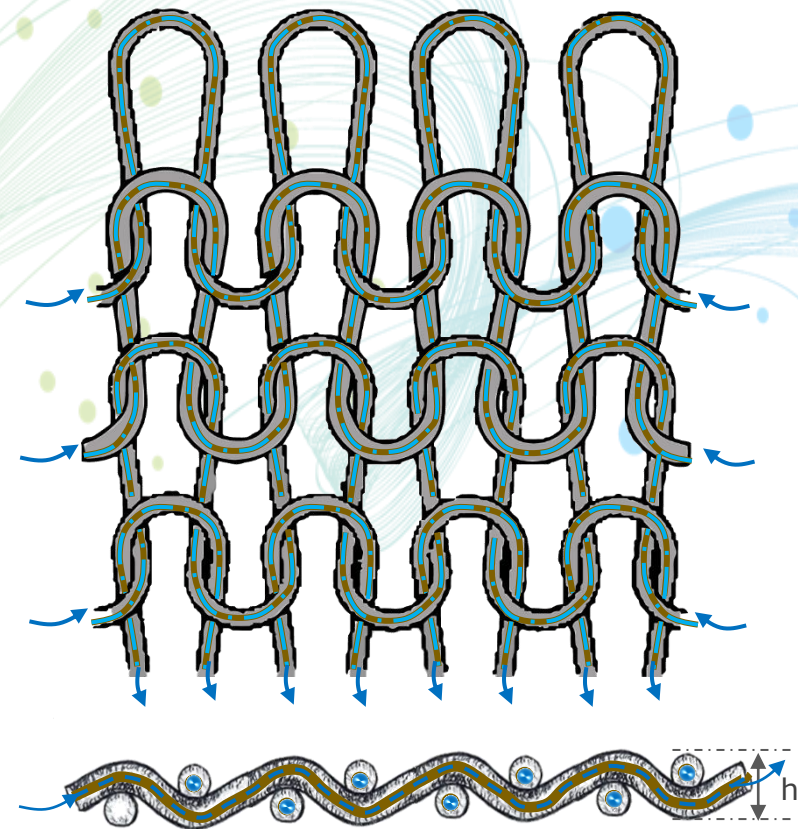
Material	Heat conductivity $\lambda(\text{W/m}\cdot\text{K})$	Material	Heat conductivity $\lambda(\text{W/m}\cdot\text{K})$
Cotton	0.071-0.073	Poly	0.084
Wool	0.052-0.055	Acrylic	0.051
Silk	0.050-0.055	PP	0.221-0.302
Viscose	0.055-0.071	PE	0.042
Acetate	0.050	Static Air	0.026
Nylon	0.244-0.337	Water	0.599



QUICK DRY



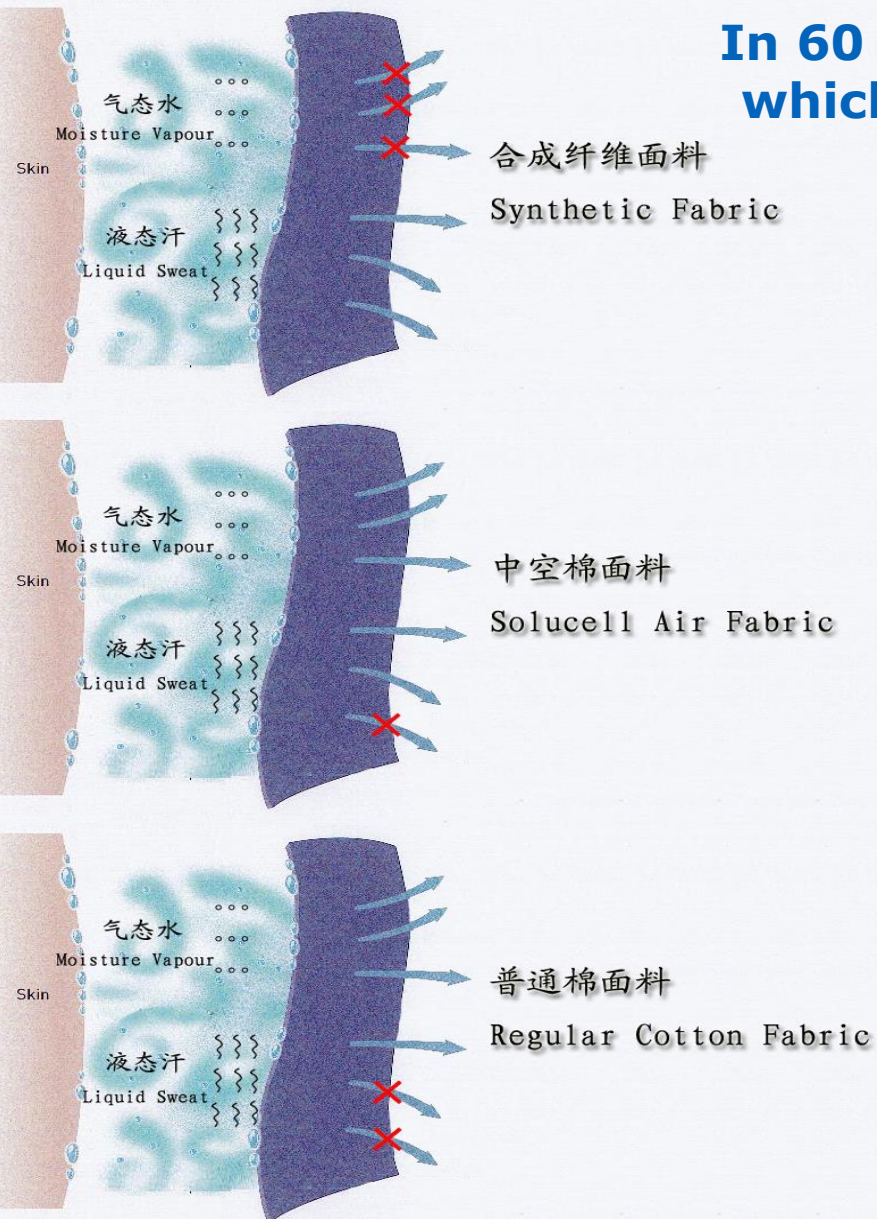
Regular Cotton



Hollow Cotton

SolucellAir Cotton – Moisture Management

In 60 minutes, residual water content performs less than 30%, which meets the Japanese hygroscopic quick-drying standard



Test on SolucellAir Cotton knitted fabric

Time (min)	Interlock - 170 g/sqm		Jersey - 165 g/sqm	
	Residual Water Content (%)		Residual Water Content (%)	
	Original Sample	Sample After 10 Washes	Original Sample	Sample After 10 Washes
0	100,0	100,0	100,0	100,0
5	94,4	95,0	95,0	95,3
10	88,4	88,3	88,3	89,4
15	81,5	81,7	81,9	83,1
20	74,6	75,0	75,2	76,7
25	68,0	68,0	2,8	70,1
30	61,1	61,3	61,4	63,8
35	54,5	54,7	55,0	57,5
40	47,9	47,7	48,7	51,2
45	41,3	41,3	42,6	45,2
50	35,3	35,3	36,9	39,5
55	29,4	29,3	31,2	33,6
60	23,8	23,7	25,8	28,6
65	19,1	18,7	21,5	23,9
70	14,9	14,3	17,4	19,3
75	11,2	10,0	14,1	15,6
80	8,3	7,0	11,7	12,6
85	6,3	4,3	9,7	10,0
90	4,6	2,3	8,4	8,3

SolucellAir – Performance in Natural Fibres

SolucellAir – The 3D Hollow Channel System inside the fabric give functions to fabrics made of natural fibres



Cotton Fibre – Selection and Sustainability

Cotton is our fibre of choice and selecting good materials is the key to quality



SUPIMA[®]
WORLD'S FINEST COTTONS

We pay high attention to sustainability and traceability. We select cotton fibres and can offer BCI and Organic certifications. Solucell based products are also Oeko-tex certified



SolucellAir Cotton – Technology to the Consumers

SolucellAir®



SolucellAir Cotton – Technology to the Consumers



SolucellAir®



ALL SEASONS TECH JEANS

Never compromise
Designed for warm and cold conditions.



SolucellAir Cotton – Innovation for Uniforms - China Fashion Week



SolucellAir Cotton – Innovation Meets Fashion - China Fashion Week



SolucellAir Cotton – Innovation Meets Fashion – China Fashion Week



Solucell Air[®]

Absolute Comfort

Thank you very much for your attention!



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BYRInternational



byr-international

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