WHAT U WEAR

CONSUMERS AND FIBERS

by Jerome Ryckborst

As consumers we frequently expect too much from our clothing. We will buy things which look good, and expect that some government rule or regulation is protecting our health, our safety, and our wallets.

Dream on. The government couldn't possibly afford to test each and every garment that hits the market. There are many fibers, fabrics, and construction techniques which could be used to make clothes. The best combination depends on the end use of the product.

According to Consumer and Corporate Affairs, today's consumer is more sophisticated than we were in 1968, when the federal government established this department. Still, there is much we simply do not know. Worse, it appears that we don't give a damn. At least not until something goes wrong. *Then* we are looking for someone to blame *and* a cash refund.

Here's a review of some common fibers and what is reasonable to expect:

Wool has itchy parts called scales. Sometimes the scales are dissolved with chemicals to prevent itchy 'allergic' reactions. Wool *can* be washed, but not agitated (moved) when washed because the scales act like fishhooks and grab all they can. The result: shrink-city. And this can't be fixed.

Silk soaks up anything, including water and mineral salts. Silk will absorb sweat, antiperspirants, and deodorants. Yummy. These chemicals disintegrate the fiber. Cleaning will flush out all the degraded bits, leaving a shredded garment. Unfortunately, most people try to blame this on their drycleaner, not on their sweat glands.

Cotton and linen come from plants. Rayon and acetate are also celluloses, but they are synthetically regenerated from wood pulp. Celluloses have one purpose in life: to wrinkle. Permanent press finishes can reduce wrinkling, but finishing also reduced the abrasion resistance of the fiber. Normal wear and tear damages the fibers and the dye comes out. In cotton this type of abrasion damage is called *frosting* and is very popular right now with denim pants and jackets. Stone-wash, as this process is called, is just accelerated wear and tear in huge washing machines with chunks of volcanic rock. (Not recommended for home washers; they'll chip and dent, and generally cause parental upset.)

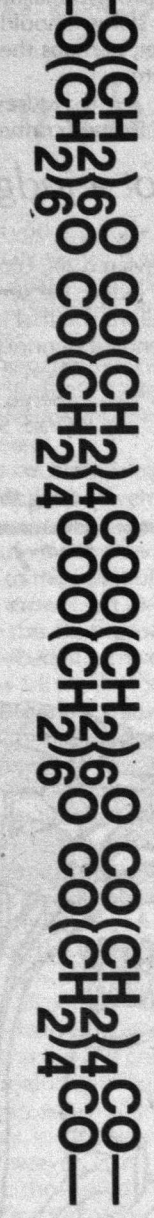
In the late 1930's and continuing through the 1950's, scientists started experimenting, making long chains of anything that would polymerize. This included wood, protein from milk, and all kinds of chemicals and hydrocarbons. Polyamide (nylon), polyester, acrylics, and many others were discovered and developed according to their behaviour as fibres.

Polyester, for example, won't wrinkle. However, it also won't absorb water, which has two implications: it won't carry perspiration away from the body, so you feel like you are swimming in sweat; it also won't diffuse electric charges, so now we have to deal with static cling. After initial success with consumers in the 1950's, polyester has now fallen into disfavour. Nevertheless, it remains the single most used fiber. Today it is usually combined with cotton. Cotton will absorb body moisture that polyester won't, while polyester will keep cotton from wrinkling, especially when used with chemicals like fabric softeners. Everybody's happy with polycotton except textile scientists and firefighters.

At the university's Textile Analysis Service, there's a whole lot of burning going on. They're testing the flammability of sleepwear. Polyester cotton blends are among the most flammable fabrics, and commonly used in sleepwear and bedding. Do *you* smoke in bed? It could be a hot night...

Nylon is another popular synthetic, used in sportswear, blended knits, and pantyhose. Nylon has poor resistance to acids. *That's* why you go through one pair of pantyhose during each fume-filled CHEM lab. Air pollution and acid rain are also great for destroying nylons. As for sportswear — nylon dries fast, but *don't* buy *white* nylon garments. Nylon is a scavenger for dyes. In the washing machine white nylon will come out pink, blue, any colour *except* white. The University of Calgary Dinosaurs often wear nylon uniforms: red and *pink* instead of red and white.

Hopefully these points were interesting enough to help you remember them the next time you're making a buying decision. If not, that's okay too, since most stores will refund or exchange no matter what you've done to your clothes.



Polyester

Nylon 66