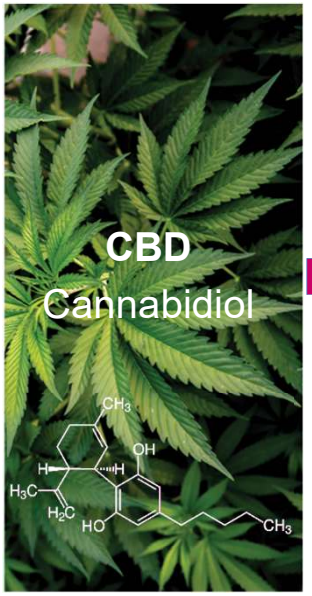
Cannabidiol in skin care textiles

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Biological effects

- Antioxidant
- Antimicrobial
- Anti-inflammatory
- Itch-relieving
- Wound-healing
- Fibrosis-inhibiting
- UV protection
- Moisturizing
- Sebum-regulating

CBD is a skin permeable cannabinoid!

Kirk A.D. et al. **2022**. Med Cannabis 5, 129; Ferreira, B.P. et al. **2023**. Phytochem Rev 22, 781.

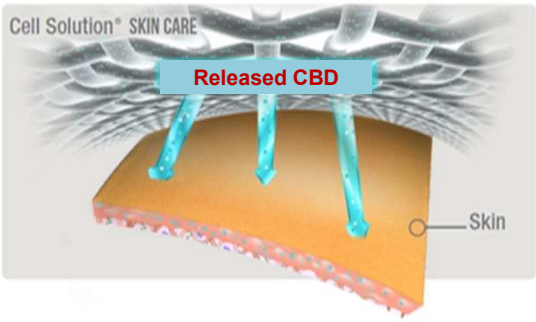
Transfer routes

- Oil-in-water emulsions (lotion)
- Penetration enhancers
- Nanoparticles

Cosmeto-textiles

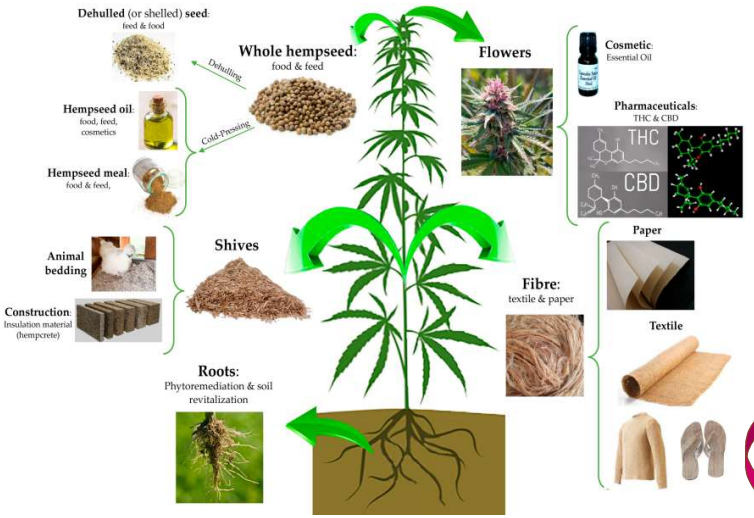
Skin indications

- Eczema
- Psoriasis
- Acne
- Systemic sclerosis
- Hereditary hair loss
- Melanoma



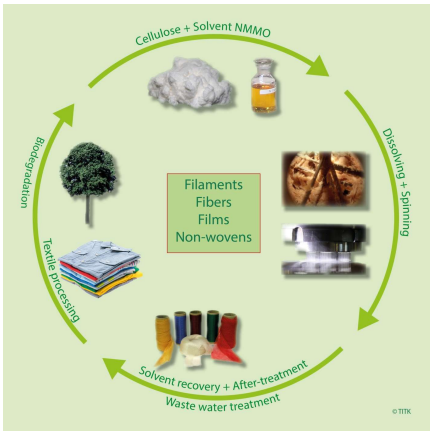
CBD – Transfer
Textile ⇒ Artificial Skin

		CBD	CBN	THC
Knitted stocking	mg/m²	**0.53**	< 0.001	< 0.001
Seamless knitting	mg/m²	**0.70**	< 0.001	< 0.001

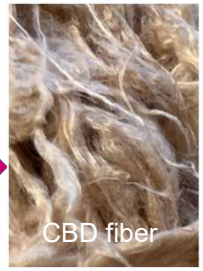


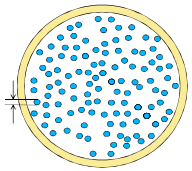
Farinon B., Molinari R., ; Costantini L., Merendino N. **2020**, Nutrients *12*, 1935

Lyocell process



Cell Solution® technology









New patent family (WO 2009/062657 A3)
Direct incorporation of lipophilic additives into fibers
German Patent: Wendler F., Meister F., Redlingshöfer B. AZ: 10 2025 002 868.7, Priority date: 22.08.2025

The method is very likely applicable to other cannabinoids, such as THC!

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