

Transdermal vs Topical

Transdermal medications are designed to penetrate the skin barrier in order to enter the blood and provide systemic (whole body) benefits. By penetrating through the epidermis, the topmost layers of the skin, and into the underlying dermis layer where the blood vessels are, transdermal products enter the blood vessels and are then transported through the blood to the organs, including the central nervous system (spinal cord and brain) to provide therapeutic benefits.

Topical formulations, on the other hand, refers to creams, lotions, ointments, and other products designed to be applied to the skin (epidermis) to permeate (travel) through the skin to act regionally (e.g., for the treatment of muscle or joint pain) for local therapeutic benefits only. They are not formulated to transport medications into the blood vessels of the subcutaneous dermal layer below and therefore are not meant to enter systemic circulation for the treatment of symptoms at sites a distance away.