BAR-ILAN UNIVERSITY

Cream on Shabbat

A new look at the use of creams on Shabbat in light of scientific findings

Joseph Ote

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Abstract

From time immemorial, the use of creams on Shabbat has been a subject of controversy in Jewish law. Some authorities have permitted the use of certain moisturizers on Shabbat, while others have prohibited the use of all creams on Shabbat. However, today, applying creams and moisturizers is common practice, whether to alleviate itchiness and irritation caused by dry skin, or for medicinal purposes, or even other reasons. Hence, the Jewish legal decisions to prohibit the use of cream on Shabbat, including the opinions of those who only prohibit certain creams, make it extremely difficult for Torah observant Jews who frequently use moisturizer or whose conditions necessitate the use of cream. In an effort to thoroughly examine the topic of applying cream on Shabbat, this paper explores the subject on two levels. The first level analyzes the biological makeup and processes of the skin, as well as the active mechanism of moisturizers. The second part of this work studies the application of cream on Shabbat from the aspect of Talmudic law and Jewish literature.

The first part of this work is entitled "The Science Section" and it explores the skin's structure as well as the characteristics inherent in creams and moisturizers.

The first chapter discusses the skin's three layers: 1. Epidermis, 2. Dermis, and 3. Hypodermis. On the one hand, each layer has a distinct anatomical and physiological function, yet on the other hand, all the layers are connected and work together to create one cohesive unit. After analysis of all three layers, it is clear that the epidermis is the layer that preserves the moisture of the skin, acting in essence as an effective protective layer against the permeation of harmful foreign bodies and the loss of water. Since this layer is the most relevant to the active mechanism in most creams and moisturizers, this paper primarily concentrates on this layer.

The epidermis is divided into five layers. The lowest layer is called Stratum Basale, or Basal Layer, in which the keratinocyte cells are produced. These cells migrate through the remaining four layers of the epidermis in a process called epidermal differentiation

and continue to develop until they turn into dead corneocyte cells replete with keratin protein which constitutes the uppermost and external layer called Stratum Corrneum, or Corrneum layer. The keratin, together with complex lipids, which are a byproduct of the cells' development, is essential to maintaining the impermeability of the skin, preventing the infiltration of foreign bodies. When there is a change in climate or in atmospheric moisture causing the skin to become dry, or in situations in which there are mutations in the process of the natural distribution of cells, the epidermal differentiation is damaged and the epidermal layer, the first of which is the Corrneum layer, loses some of its ability to protect the body. Hence, it is necessary to cure it.

Chapter two explains that when the epidermal layer is damaged or in a state of dehydration, medical literature recommends clinical treatment by applying cream and moisturizer on the skin. Recent research shows that the active ingredients in creams do not really provide the skin any moisture itself, as was previously thought. Instead, they help restore the processes that naturally occur in the epidermal layers, in order to reestablish their ability to protect the body and in that way allow the skin to heal. From here we learn that the purpose of the ingredients in moisturizers and ointments is that they are absorbed into the different layers of the skin, becoming part of its composition physiologically, and that no benefit is derived from the cream when it remains an independent layer on top of the skin.

The second part of this paper is called "The *Halakhic* Section", in which the subject of creams on Shabbat is analyzed from the standpoint of Jewish Law by conducting a thorough examination of the Talmudic opinions and the rulings made by various early rabbinic authorities, called *Rishonim*.

Chazal, Jewish Sages, specify that the act of smoothing on Shabbat is forbidden. They learn this from the definition of spreading, listed as number thirty of the thirty-nine *melakhot*, primary prohibited actions on Shabbat, which appear in tractate Shabbat of the Mishna. This prohibited act is coined "*memareach*", the spreading of a substance on a surface, a secondary category, derived from the primary category of "*memachek*,"

smoothing. Since applying cream and moisturizer nowadays resembles the act of spreading mentioned in the Talmud, the question arises: is putting cream on one's body permitted on Shabbat?

A comprehensive investigation is conducted in order to answer that question and understand the range of conclusions reached within Jewish practice. From this analysis, another question arises: what is the actual prohibition of spreading? Is the prohibition smoothing the skin so that the body will stay smooth or is it smoothing the skin to ready it for a different purpose?

The first chapter in this section examines the primary prohibited act of smoothing. The definition of this act is the repair or smoothing of a pre-existing rough surface (i.e. skin or any other type of object) by removing the top layer of the surface. This paper finds four approaches in defining the prohibition. According to Rashi, the act itself of smoothing is the primary prohibited act. Most *Rishonim* however maintain that the prohibition applies only to the smoothing of a surface if done for the purpose of preparing it for another use. Furthermore, according to Ramban, the prohibited act on Shabbat also entails the softening of the surface and not only smoothing. Rambam and Me'iri add that intent to smooth the surface is necessary in order to render a person liable of violating the biblical prohibition of smoothing.

In the second chapter this paper examines the secondary prohibition of spreading. In contrast to smoothing, which is the repair or leveling of a surface by the removal of the already-existing surface, the secondary prohibited act of spreading is dependent on the type of substance applied and whether or not it is applied evenly in order to create a smooth layer on top of the pre-existing surface. From here it is learned that the application of a substance on another surface when done by smoothing is the definition of spreading, which is prohibited, and that is also how the *Shulhan Arukh* rules. However, this paper shows that there is a distinction between thicker substances and thinner substances, for some do not spread evenly, and consequently there is a difference

in their classification as either biblical or rabbinic prohibitions. In either case, from here it seems that any application of cream or moisturizer on Shabbat is forbidden.

The Magen Avraham offers a novel interpretation, according to which, if a person has intent for the ingredients of the cream to be completely absorbed into the layer of skin or other surface onto which it is applied and is not interested in leaving the substance on top of the surface, then it no longer resembles the prohibited act of smoothing. Since the surface itself is not made smooth for its own sake nor to ready it for another purpose, such an action, therefore, does not fall under the secondary category of spreading. Yet, some do not accept the Magen Avraham's approach.

Towards the end of chapter two is an analysis of the opinions of the prominent \hat{Ah} aronim (later rabbinic authorities) as well as those of the contemporary rabbis and their approaches regarding the application of cream and moisturizers on Shabbat. Some prohibit all type of cream, whereas others permit only those moisturizers which are thin and liquid. Additionally, some have permitted thicker and more viscous creams that when applied can be completely absorbed by the skin, as discussed in the Magen Avraham's opinion. This analysis is labeled "the test of viscosity."

Subsequently, this paper discusses the question if in applying cream on Shabbat one violates the prohibition of practicing medicine on Shabbat. The conclusion is that according to the rabbinic literature the use of creams on Shabbat poses no problem from a medical standpoint.

In the third section entitled "Science and Halacha" we combine both the aspects of science and Jewish law. The disagreement between the rabbinic authorities in Jewish law stems from the different ways of defining the prohibited actions (*melakha*) on Shabbat. The finding of this paper is that there are three approaches to defining the principle of spreading a substance on a surface, which is a secondary category of *melakha*, derived from the primary category of smoothing. The first approach is that the spreading and application itself of the cream which produces a new layer is prohibited.

The second is that smoothing the surface is only prohibited if one is preparing the surface for a particular use; however, the act of smoothing itself is not prohibited. The third is that the intent to permeate the ingredients into the skin is not considered a prohibited action derived from the *melakha* of spreading a substance onto a surface.

In my humble opinion, scientific research regarding the mechanism of human skin and information attained about the composition of moisturizer and how its active ingredients work contributed to this paper's findings. The conclusion of this paper is that the application itself of cream causes its ingredients to be fully absorbed into the skin in order to restore the skin's effectiveness. Thus, the use of cream does not constitute a violation of the prohibition to spread a substance on Shabbat, nor does it posses any of the characteristics necessary to render it prohibited for it does not fit the definition of prohibited acts on Shabbat based on our conclusions from the Jewish legal literature according to all opinions. Therefore, it seems that there is ample room to permit the use of creams and moisturizers on Shabbat.

Towards the end of this paper, in an effort to apply the research attained towards other topics, the question of using sunscreen and cosmetic creams on Shabbat is raised. However, this paper finds that the matter requires further investigation and that additional research is necessary.

Finally, this paper does not constitute a legal Jewish ruling, for decisions in Jewish law are made by highly trained, experienced, and learned rabbinic authorities. Rather, this paper serves to present the scientific findings as well as the Jewish legal aspects on this subject so as to provide the necessary background to enable Jewish scholars to make a more informed and accurate ruling regarding the prohibition or permission of applying cream on Shabbat.