

# ספירימ

סיוע לציבור, פסקי הלכה, רכיבים, מארעות ומדע  
Updates for the cRc Kashrus Professional

סיוע לציבור  
COMMUNITY

## Warming Drawers on Shabbos

One way in which we fulfill the *mitzvah* of *oneg Shabbos* is through the enjoyment of consuming our *Shabbos* food. One challenge of this *mitzvah* is to figure out how to make that food hot or warm on *Shabbos* morning. The most common method is to serve *cholent* or *chamim* (depending on which part of the world your ancestors are from), which is a special stew that is left on the *blech* from before *Shabbos*. But for one reason or another, there are lots of people who appreciate being able to have some other food, and they are always on the alert for creative new ways to warm that food up for the *Shabbos seudah*. That has led consumers to ask if and how they put food into a warming drawer on *Shabbos*. As expected, the answer to this modern question can be found by analyzing the earlier sources of the halacha.

There are two reasons why one is not permitted to put food onto the fire (or the *blech*) on *Shabbos* even if the food is fully cooked:<sup>1</sup>

- Someone who is watching what you're doing may think that you are cooking the food, and be misled to think that cooking is permitted on *Shabbos* or that you aren't observant.
- After putting the food onto the fire, you might stoke/adjust the flame to speed up the warming process.

This prohibition is called *chazarah*, and the two reasons given are known respectively as *mechzi k'mevashel* and *shemah yechateh*.

Over the years, numerous methods of warming up food for the daytime *Shabbos seudah* have been suggested, with the most accepted being placing the (fully

cooked, dry) food on a part of the *blech* that's cooler than *yad soledes bo* (120° F)<sup>2</sup> or on top of another pot that's already on the fire.<sup>3</sup> The reason these suggestions are acceptable is because both reasons to forbid *chazarah* don't apply – no one would think the person is cooking and they are sufficiently unusual to remind the person not to adjust the fire.<sup>4</sup>

We now return to the warming drawers. The simplest models are constructed to only have one setting and that setting is not at a hot enough temperature to cook food. Putting food into such a warmer doesn't give the appearance of cooking, because it can't possibly get hot enough to cook, and there is no concern of *shemah yechateh* because it doesn't have an adjustable flame or thermostat.

What about more sophisticated warmers that have multiple settings (e.g. low, medium, high) when some of those settings produce temperatures well over 200° F and can theoretically be used for slow cooking? Rav Schwartz has taken the position that such warmers may be used if (a) the warmer to set to "low" (i.e. a temperature where it can't be used for cooking) and (b) the knob used for adjusting the temperature is removed or covered. Under those circumstances, the two concerns of *chazarah* are addressed as there's no concern you'll adjust the temperature and anyone looking at the full picture will realize you can't possibly be cooking. Therefore food may be placed into the warmer on *Shabbos*.

It is worth noting, that the above discussion is limited to cases where the food is completely cooked and contains no liquids at the time that it is placed into the warmer. If however, the food is not fully

<sup>1</sup> See *Mishnah Berurah* 253:37 and *Sha'ar HaTziun* 253:37 citing the opinions of *Rashi*, *Shabbos* 36b מחזירין ב"ה לא מחזירין ד"ה לא מחזירין (Sefer HaYashar, Chiddusim to *Shabbos* 36b) and others.

<sup>2</sup> See *Iggeros Moshe* O.C. I:94.

<sup>3</sup> See *Shulchan Aruch* 253:3.

<sup>4</sup> The rationale presented in the text to even permit *chazarah* on *Shabbos* for food that wasn't on the fire, follows the apparent and generally accepted (in the USA) opinion of *Iggeros Moshe* (O.C. IV:74 *Bishul* #35) as opposed to *Shemiras Shabbos Kehilchaso* (1:25 and footnote 72).



cooked or contains liquids, one must consider the more serious questions of *bishul*, and would be forbidden from warming the food in the warming drawer (or just about anywhere else).



## Gevinas Yisroel on Acid-set Cheeses

Part 2 of 2

*In the first half of this article we saw that rennet-set cheese requires gevinas Yisroel, but it is generally accepted that acid-set cheese (e.g. cottage cheese, cream cheese) does not even if it contains a small amount of rennet.*

### Different types of acid-set cheese

In the context of understanding these issues it is worthwhile to subdivide acid-set cheeses based on how they are acidified and whether there is any separation of curd, as follows:

- Milk which is acidified through the addition of vinegar, lemon juice, or some other acid, is most similar to rennet-set cheese in that “something” is added to the milk which causes it to change into cheese. As such, the strict opinion cited above has their strongest argument in this case.
- A somewhat similar case is milk which is acidified via the introduction of lactic acid producing cultures/microorganisms. In this case, the culture doesn’t directly affect the cheese but it creates a byproduct which causes the cheese to form (much like rennet does).
- However, some cheeses form through a mere souring of the milk (as a result of sitting un-refrigerated for some time) without anything added to it. This case is least similar to rennet-set cheese.
- In many forms of acid-set cheese (e.g. farmers and cottage cheese) the finished cheese is curd, much like rennet-set cheeses are. However, other cheeses such as sour cream include the entire milk rather than just the casein/curd. In this way, sour cream is so different than rennet-set cheese, that it’s not clear if any *Poskim* would hold that it requires *gevinas Yisroel*.

From this perspective, the word “yogurt” includes two distinct types of cheese. “Strained yogurts” are similar to the

farmers and cottage cheese discussed above in that the finished product is just curd, with the whey being strained/filtered out. Other yogurts include all of the elements present in the milk (in a congealed form) with no separation of curd and whey to speak of.<sup>5</sup> As noted, it’s not clear if any *Poskim* would rule that the latter form of yogurt requires *gevinas Yisroel*, and the *Acharonim* who ruled that “yogurt” must be *gevinas Yisroel* were likely discussing strained yogurts.

### Skyr

The above issues are somewhat more complicated when dealing with Skyr which contains the relatively small amount of rennet associated with acid set cheeses, but cannot possibly take on its true identity without that rennet.

For hundreds of years, the people of Iceland have consumed a low-fat, high-protein, yogurt-like food known as Skyr (pronounced “skeer”), and in recent years they have begun selling this item in the United States. Without rennet, Skyr is a watery yogurt beverage, but it is so commonly made with rennet to thicken it, that an expert who once saw a recipe that appeared to not contain rennet was sure that it was a mistake.

Skyr contains too little rennet to independently coagulate the milk and therefore appears to qualify for the lenient logic proposed by *Iggeros Moshe* and presented in the text above. On the other hand, the underlying assumption of the lenient opinion is that the prohibition of *gevinas akum* doesn’t apply to cheeses which don’t require the addition of rennet; if so, since rennet is required to give Skyr its authentic form one could argue that it should require *gevinas Yisroel* and the secondary issue of what role the rennet plays should be unimportant.<sup>6</sup>

Rav Schwartz was inclined to be lenient on this issue as in essence Skyr is an acid-set cheese, and the rennet merely plays a minor role in the cheese’s final form. See

<sup>5</sup> It appears that un-homogenized milk is used to produce strained yogurts while homogenized milk is used for the other yogurts, as the casein in homogenized milk remains in solution under more adverse conditions (much in the way homogenized milk requires more rennet to coagulate).

<sup>6</sup> There are also forms of sour cream that use relatively large amounts of rennet for an acid set cheese (i.e. 6 ml. per 1,000 pounds) so that the sour cream will be thick enough to maintain its form after it is scooped out of the container.

the footnote regarding whether one can infer a lenient position on Skyr from the common custom to not require *gevinas Yisroel* on bakers cheese.<sup>7</sup>

### Rennet use in different cheeses

In the preceding pages we've seen that the common custom is that acid-set cheeses do not require *gevinas Yisroel* even though they may contain a minimal amount of rennet. Which cheeses qualify for this leniency? How can one tell whether the amount of rennet used is "minimal" or not? The following chart shows that the amount of rennet used in rennet-set cheeses is so much greater than acid-set cheeses, that by merely checking the cheese's recipe one can easily know whether it does or doesn't require *gevinas Yisroel*.

The chart is based on information given to the cRc by David P. Brown, Senior Extension Associate at the Department of Food Science of Cornell University in Ithaca, New York, in November 2007. He cautioned that although the numbers given appear to be very exact, in fact the amount used varies up and down based on the production procedure used in the plant. Nonetheless, the difference in the amount of rennet used in rennet set cheeses as compared to acid set cheese is so great, that minor fluctuations from plant to plant are insignificant.

Cheese	Milliliters of rennet per 1,000 pounds milk
Asiago cheese	70
Bakers cheese	4
Blue cheese	72
Brick cheese	86
Cheddar cheese	90
Colby cheese	90
Cottage cheese	1
Cream cheese	2
Edam cheese	128

Cheese	Milliliters of rennet per 1,000 pounds milk
Emmentaler cheese	70
Farmers cheese	1
Feta cheese	90
Gouda cheese	128
Limburger cheese	86
Mascarpone cheese	0
Monterey cheese	85
Monterey jack	85
Mozzarella cheese	85-90
Muenster cheese	86
Neufchatel cheese	2
Paneer	0
Parmesan cheese	70
Pot cheese	1
Provolone cheese	85-90
Reggiano cheese	70
Ricotta cheese	0-4
Romano cheese	70
Roquefort cheese	72
Sap Sago cheese	70
Scamorza cheese	85-90
Skyr	0-2
Sour cream	1-6
Swiss cheese	70
Yogurt	0

#### Notes

- Acid-set cheeses are highlighted in blue.
- Although pasteurized process cheese (i.e. American cheese) isn't listed in this chart, it is clearly a rennet-set cheese, and the amount of rennet required depends on the base cheese used in production.
- 1,000 pounds of milk is equal to approximately 116 gallons or 439 liters.<sup>8</sup>



<sup>7</sup> Some have suggested that we can infer a lenient position on Skyr from the common custom to not require *gevinas Yisroel* on bakers cheese. They argue that in the same way that bakers cheese cannot properly form without rennet, but it is leniently viewed as being an acid-set cheese, so too Skyr should be treated leniently. However, in addition to questioning the status of bakers cheese itself, one could question this proof based on David Brown's assertion that rennet doesn't actually play any role in the actual formation of bakers cheese. He suggested that:

Bakers cheese is made from skim milk like cottage [cheese] but is not cut or cooked. It is dipped or pumped into muslin bags (traditional method) or pumped through a curd separator. The addition of the rennet helps with draining or separation of the whey from the curd. The rennet indirectly serves as a processing aid.

<sup>8</sup> The specific gravity of milk is 1.035 which means that 1,000 pounds of milk has the same volume as about 966 pounds of water. Since there are 8.33 pounds of water per gallon and 3.79 liters in a gallon, we can calculate that 1,000 pounds of milk is equal to about 116 gallons ( $966 / 8.33 = 116$ ) or 439 liters ( $116 * 3.79 = 439$ ).

## Know your Kosher Molecules

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*The following is a transcript of Rabbi Rosenfeld's presentation at the AKO General Membership Conference on November 13, 2007.*

Knowledge of chemistry is an absolute must for someone involved in serious kosher certification, and the following are some examples of where that knowledge is useful:

### Taurine

Taurine (2-aminoethanesulfonic acid) was discovered in mussels, mammal milk, and oysters and it was deemed important enough to be added to infant formulas, energy drinks and similar items. Should we be concerned that it is in fact produced from animal sources? In nature it is found at only 0.2 grams per kilo of meat which means that a kilo of taurine should cost a few hundred dollars, yet it sells regularly for a few dollars a kilo because it can easily be synthesized from ethanolamine and sulfuric acid (e.g. oleum or vitriol). Thus, knowing a bit about the science of how it can be produced and the cost of the finished product, makes it clear that it is almost always produced synthetically and doesn't present a *kashrus* issue (with the exception of "natural taurine" which obviously does).

### Onion Oil

2-3 tons of onions are required to produce a kilo of onion oil, and that product sells for \$3,000 a kilo. However, the synthetic version sells for next to nothing and in almost every application one would have to be out of their wits to purchase the "real" onion oil. This case is the opposite of the previous one, in that true onion oil is free of *kashrus* concerns, while synthetic onion oil is a blend of various materials – including, but not limited to, stabilizers and diluents – which require investigation before approval as kosher.

### Bone Oil

Someone asked how the LBD can certify polyvinyl pyrrolidone (PVP) if the Merck Index says that pyrrol is derived from bone oil which is in turn derived from the destructive distillation of bones! The faults with these questions are that (a) pyrrol can be made infinitely cheaper via a Hantzsch pyrrol synthesis of formaldehyde and

ammonia and (b) polyvinyl pyrrolidone is made via a polymerization process and not from pyrrol at all.

As an aside, the aforementioned destructive distillation process of bone oil yields a byproduct known as "animal charcoal" or "bone char" which is commonly used in the continuous process of sugar purification; this process is common in the United States but banned in Europe.

### Hexalactone

A *Rav HaMachshir* once asked which oil is used to create hexalactone, which showed his lack of knowledge because (a) (gamma) hexalactone is produced cheaply from the condensation of sodio-malonic acid and ethylene oxide, and (b) although hexanoic acid (C-6) comes from oil, it's impossible to produce hexalactone from hexanoic acid.

### Indigo Carmine & Carmine

Indigo carmine (a.k.a. acid blue 74) was discovered in 1878 and synthesized a few years later. It is produced from ortho-aminobenzoic acid (Anthranilic acid) and poses no *kashrus* concerns. Unfortunately, it has the word "carmine" in its name which causes people to be nervous.

Carmine is created from crushed beetles and is clearly not kosher. There is currently no method of producing it through synthetic means in a laboratory.

An LBD *Mashgiach* once came across a biscuit from China labeled as containing "all natural ingredients" which listed E-120 (carmine) on the ingredient panel and, as expected, the biscuit had a reddish color to it. When the *Rav HaMachshir* told them that it was a printing error, the LBD isolated the color from the biscuit and ran a thin layer chromatography (TLC) test on the color and on carmine, and it indicated that the color was carmine. They showed these results to the *Rav HaMachshir* who responded that his lab told him that there's no test for carmine (but he and his lab didn't respond when the LBD showed him how they arrived at these results. Four months later (!) the *Rav HaMachshir* sent a *Mashgiach* to the plant who reported that the company was using Ponceau 4R (a

synthetic color,<sup>9</sup> which isn't legal in the USA), but of course, the *Mashgiach* really can't visually discern between carmine and Ponceau 4R and didn't bother bringing some back to a lab for testing.

If the *Rav HaMachshir* in this case had sampled the ingredient and performed his own analysis, he'd have created true *mirsas* and earned the respect of the company, because companies can quickly differentiate between those who "know the business" and those who don't.



## EXPERIENCE

### Mislabeled Product

A specific retail establishment represented their foods as being of a perceived higher quality (e.g. organic meat, farm-raised eggs) of the type that has no bearing on *kashrus*. A suspicious consumer checked through the store's garbage and found that these representations were false, and brought it to the attention of the *Rav HaMachshir* who was able to confirm the allegations. Should this type of fraud be sufficient grounds for removing kosher certification from the store?

In response to this, Rav Schwartz pointed to *Shulchan Aruch*<sup>10</sup> who cites two opinions as to whether someone who is a *מומר* for thievery or similar *aveiros* is trusted to check his own *shechitah*-knife. [מומר for these purposes is defined as someone who repeatedly violated the prohibition].<sup>11</sup> The first opinion holds that such a person can be trusted but the second opinion, of *Rambam*,<sup>12</sup> says that he is suspect. In 1947-48, Rav Schwartz learned *Chullin* and he can still hear the voice of his *Rebbi*, Rav Dovid Lifschitz zt"l, ringing in his ear as he read the words of *Rosh*,<sup>13</sup> which explains *Rambam's* position:

והרמב"ם ז"ל כתב דישראל עבריין לאחת מן  
העבירות צריך לבדוק לו סכין. ואפשר דסבר כיון  
דחזין שלתאותו עובר אחת מן העבירות שבתורה  
חיישין דפקר שלא לטרוח לקיים שום מצוה  
כהלכתה.

*The Rambam zt"l writes that one must check the shechitah-knife of a Jewish person who callously violates one of the mitzvos. According to the Rambam it*

*may be understood that once we've seen that the person violates a Torah prohibition for personal gain, we must be concerned that he won't make the effort required to perform any other mitzvah properly.*

Rav Schwartz was left with a lasting impression that one should be wary of people who steal or cheat in the non-*kashrus* portion of their business; being dishonest or misrepresenting food as organic doesn't directly affect *kashrus*, but it shows a conniving nature which might lead the person to eventually deceive people on *kashrus* issues.

Therefore, we should view mislabeling a product as a *kashrus* violation even though the mislabeling was about a non-*kashrus* issue.



### Penalty for a Mistake

An RC mistakenly booked a flight for the wrong day, and the airline charged \$55 to correct the mistake. Rav Schwartz ruled that employees are expected to be careful when spending their employer's money, and therefore the RC is halachically required to pay the penalty his mistake. He did however note that in many such cases, the employer chooses to overlook and absorb such mistakes if they don't involve too much money, and – before he got these words out of his mouth – Rabbi Kushner said that he'd cover the cost and be *mochel* his rights.



<sup>9</sup> Incidentally, Ponceau 4R (E124) also goes by the name Cochineal Red A.

<sup>10</sup> *Shulchan Aruch* Y.D. 2:6.

<sup>11</sup> See *Taz* 2:9 & *Shach* 2:18.

<sup>12</sup> *Rambam, Hil. Shechitah* 4:14.

<sup>13</sup> *Rosh, Chullin* 1:7 cited in *Taz* 2:9.