Volume 12

Brief summaries of cRc Kashrus Policies

## KASHERING AT 190° F

Shulchan Aruch and Mishnah Berurah note that even when *kashering* is performed with a kli rishon that is no longer on the fire, the hag'alah water must remain at roschin temperatures. Most people assume this means that the water must be 212° F, and that is reflected in Iggeros Moshe who says:

וגם צריך שחום המים המגעילין יהיה לא פחות משתי מאות ושנים עשר שרק בחום זה הם רותחין להגעלה... לכן צריך שיהיה בחום לא פחות מרי"ב שזהו רותחין

At the same time, Rav Belsky quoted Rav Moshe Feinstein as saying that בשעת הדחק 190° F suffices for hag'alah. There is a source that "רותח" might be less than 212° F from a Gemara which says that a pot taken off the fire during bein hashmashos is still considered רותח at nightfall, even though the pot clearly cools off somewhat during that amount of time. But how can we pinpoint the lowest temperature that still qualifies as רותחין?

Rav Belsky explained that Rav Moshe told him that not actually require a rolling boil, and it is good enough if there is a para - a Yiddish word which means a layer of steam - above the pot of water. [Nonetheless, Rav Moshe said that l'chatchilah the water should be 212° F]. Rav Belsky tested this and found that the para formed when the water was at 190° F. Thus, Rav Moshe did not actually say that 190° F is suited for hag'alah but rather that one can kasher when there is a para, and Rav Belsky measured this himself and found that it occurs at 190° F.

In my own testing I found that regardless of the size of the pot used, there seemed to be three distinct stages of how steam formed in and over the pot:

- Stage 1 was just light wisps of steam at about 120-140° F.
- Stage 2 was a light, but steady, steaming which occurred at about 160-170° F.
- Stage 3 was medium/heavy steaming, which was usually accompanied by the first steady, minor bubbling, and happened at about 200° F.

If we were to guess which of these stages Rav Moshe was referring to, the logical choice would seem to be Stage 3, because (a) that seems to be close to a rolling boil (212° F), and (b) Stage 2 is the temperature which Rav Moshe identifies elsewhere as being yad soledes bo. After seeing this experiment, Rav Belsky did not have any immediate explanation for how 190° F could qualify as the *para* which Rav Moshe said is considered רותחין. Accordingly, it would appear more appropriate to say that רותחין – even as per the explanation of Rav Moshe - does not begin until the water is at least 200° F.



## **CRC POLICIES**

34. Does water have to be 212° F to be considered רותחין or is some lower temperature also enough? What would that lower temperature be?

The optimal *kashering* is at 212° F. Where that is not possible, we should aim for as close to 212° F as possible, but never allow less than 200° F.

One exception where temperature of less than 200° F would be acceptable, is where the production temperature is carefully controlled, and the *hag'alah* water is hotter than the production temperature (see Questions #61-62).

35. If there is a lower temperature for , can that be relied upon *l'chatchilah* or just *b'dieved*?

*B'dieved*, see Question #34.

## <u>מראה מקומות</u>

שולחן ערוך סימן תנ"א סעיף ג' משנה ברורה תנ"א ס"ק כ' אגרות משה יו"ד חלק ב' סימן ל"א גמרא שבת מב.