

# ספירם

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

סיוע לציבור  
COMMUNITY

## Kedairah Blech

An article in *Sappirim* 6 noted that there are two reasons to forbid *chazarah* (putting food on the fire on *Shabbos*): *mechzi k'mevashel* (it appears that one is cooking) and *shemah yechateh* (the person might adjust the fire to warm his food faster). That article focused on whether one may place food in a warming drawer on *Shabbos*, and the current article continues that discussion as relates to placing food on a *kedairah blech*.

The first part of this article noted that one may place (dry, fully cooked) food on top of a pot that is already on the fire, because it is such an unusual way of heating food that no one would mistaken that for cooking and there is no reason to think the person will adjust the flame. This method of warming food is known as *kedairah al gabei kedairah* (one pot on top of another pot). Consequently, a number of years ago someone developed the "*kedairah blech*" which is a combination of a *kedairah* (pot) and a *blech*.

The *kedairah blech* consists of two parts (a) a rectangular shallow pan, which is about 1 inch deep, and is wide and long enough to cover the four burners on most stovetops and (b) a cover which fits snugly on top of the pan. Before *Shabbos*, the *kedairah blech* is filled with 6-8 cups of boiling water, covered, and placed on the stovetop with one small flame burning. The flame must be set to exactly the right intensity whereby it can keep the water hot enough to warm food put onto the cover, but not so hot as to boil out before *Shabbos* morning.

There are two advantages of the *kedairah blech* over an ordinary *blech*. Firstly, the hot water evenly spreads the flame's heat throughout the entire *blech* such that there are no "cold spots" on the *blech*. However, those who designed the *kedairah blech* argue that there is a considerably more significant advantage; namely, the *kedairah blech* is actually a "pot of food/water" which is on the fire, and therefore one may place (dry, fully cooked) food onto the *kedairah blech* on *Shabbos*! They suggest that just like one may place a cold *kugel* on top of a tall *kedairah* of *cholent* on *Shabbos* morning, so too one may place the *kugel* on top of the low, wide *kedairah* (*blech*) of water.

However, a number of prominent *Poskim*<sup>1</sup> argue that the only reason one warm food on a pot is because doing so is radically different than putting the food onto the fire or onto a *blech*, and the *kedairah blech* does not meet this criteria because it looks so much like a traditional *blech*. On the other hand, Rav Schwartz and many others<sup>2</sup> hold that the *kedairah blech* is in fact a "pot of food" and can be used to warm food on *Shabbos* (assuming it is dry and fully cooked). A *teshuvah* from Rabbi Yehoshua Neuwirth, author of *Shemiras Shabbos K'hilchaso*, is presented in the footnote.<sup>3</sup>

In this context, it is noteworthy that the creators of the *kedairah blech* caution that since the water in the *kedairah blech* cannot be too hot (as above), (a) large pots of *cholent* should not be left on the *kedairah blech* beginning before *Shabbos* as they may not be hot enough to prevent spoilage, and (b) one should not count on the *kedairah blech* to finish off the cooking of any food.<sup>4</sup> The fact that food cannot possibly be cooked on a *kedairah blech* supports the lenient opinion that there cannot possibly be a concern of *mechzi k'mevashel*.

<sup>1</sup> Rav Elyashiv (*The 39 Melachos*, Rabbi Dovid Ribiat, pages 622-625 and *Bishul* footnote 212), Rav Belsky (*ibid.* footnote 211 and personal communication with the author), and Rav Fuerst (personal communication with the author). Rav Fuerst explained that this position is based on Rav Elyashiv's understanding of *Pri Megadim* (A.A. 253:33 cited in *Blur Halacha* 253:3 s.v. *v'yizaher*) that a *kedairah* is only considered "full of food" if the food is intended for consumption during *Shabbos*.

<sup>2</sup> Rav Herschel Schachter (personal communication with the author), Rav Dovid Feinstein and Rav Dovid Zucker (personal communication with *talmidim*).

<sup>3</sup> A number of years ago, Rabbi Leonard Matanky, Rabbi of Congregation KINS in Chicago, wrote to Rabbi Yehoshua Neuwirth asking for a ruling on whether one can use the *kedairah blech* to warm foods on *Shabbos*. Rabbi Matanky's question and Rabbi Neuwirth's lenient ruling are presented below:

באר"ב המציא באחרונה מה שנקרא "קדירה בלעך". זה למעשה כלי מגש בגודל כל הכיריים ויש לו שוליים לא גבוהות בגובה אינץ' בערך ועליו יש מכסה. בתוכו שמים מים.  
דבר זה נעשה במטרה לשימושי ע"ג האש ויבשל את כל הכיריים. אלא שרצוים להרוויח בהו שיקרא שיש קדירה ע"ג האש וממילא ממילא אפשר להחשיב מדון קדירה ע"ג קדירה. (הדברים מבוארים ודיונים מה שהביא המ"ב בס' רד"ג בשם הפמ"ג על חילוק הדברים בין ב' המקומות. באור הלכה ד"ה ויהר שלא שים וכו' שחילק בין ע"ג קדירה לבין ע"ג קדירה ריקנית (וע"ע חז"א לז"ט ד"ה הקשה המ"ב).)

והשאלות הם:  
א. האם נחשב קדירה או כלי, גם אם השוליים רק בגובה אינץ' אחד או צריך שיהיה בית קיבול גדול יותר?  
ב. החילוק שחילק הפרי מגדים בין להעמיד ע"ג קדירת חמין ותבשיל לבין אם נתן קדירה ריקנית שכל מטרתה רק לעשות האש לגרופה וקטומה שאז אסור ליתן עליה תבשיל. אך יהיה בידון דודן, שאמנם מצד אחד יש סאן קדירה עם תבשיל - שהוא המים ששמים בתוך הכלי הנ"ל, אך מאידך כל התבשיל, דהיינו המים, ניתן מלכתחילה רק במטרה ליצור מצב כזה?

העיקר הוא שיש קדירה עם תבשיל מתחת לקדירה ששמים בשבת (וכמוכן שמותר רק במקרה ואין איסור בישול אחר בישול) הבלעך הנ"ל שע"ג מים נחשב כקדירה וממילא הוא קדירה ע"ג קדירה עם תבשיל המוזכר בבב"ל ט"ג' ב' בשם הפמ"ג, כי אין דרך בישול בכך.

ג. האם בדיון קדירה ע"ג קדירה צריך "בלעך" נוסף?  
תשובה: לא, הבלעך עושה לגוף.

<sup>4</sup> <http://www.milechai.com/k/kdeirah2.html>.



## Greenhouse Produce of Shemittah

### Introduction

Israel is a leading developer of greenhouse technology. The primary impetuses for these innovations were a desire to help farmers to obtain larger crops than otherwise possible, and to allow for agricultural development in areas that were not considered arable. It was later discovered that this method of growing could also bring great benefit to the kosher consumers because the conditions in the greenhouses could be manipulated to produce vegetables that were free of insects.

However, our discussion will focus on another possible benefit of growing produce in a greenhouse, namely, are they possibly free of *shemittah* concerns? There are two possible reasons why greenhouse produce should not be considered "*shemittah* produce": (1) Such produce does not derive any nourishment from the ground and (2) Such produce is grown indoors. In the coming paragraphs we will discuss these issues (known respectively as *נקוב עציץ שאינו נקוב* and *זורע בבית*) and other possible reasons to be lenient.

This discussion is particularly relevant to those of us living out of *Eretz Yisroel* because greenhouse produce is exported to other countries, especially prior to *Pesach*, when many consumers look to buy bug-free romaine lettuce for use as *marror* at the *Seder*. In many cases, such produce will be marked as being from a "*מצע מנותק*" (disconnected bed) or from "*זרוע בבית/חממות*".

### עציץ שאינו נקוב

Plants that grow in flowerpots which have no holes in them (*עציץ שאינו נקוב*), are *mid'oraisah* not considered to be growing in the "ground", because the plants cannot draw nourishment from the ground. As relates to most halachos, the halacha is quite clear that such plants are *mid'rabannan* considered to be attached to the ground.<sup>5</sup> However, *Chazon Ish*<sup>6</sup> points out that the *Gemara* never makes such a statement regarding *Shemittah*, and

he suggests that possibly *Chazal* were especially lenient in this regard due to the hardship of observing *Shemittah*. Although *Chazon Ish's* conclusion is to be *machmir* on this issue,<sup>7</sup> we will see that he considers it as a contributing factor towards being lenient in certain cases.

Although greenhouse-grown produce might not always qualify as an *עציץ שאינו נקוב* due to details of which pots and plants qualify for that status,<sup>8</sup> during the *Shemittah* year some companies line the floor of their greenhouses with thick plastic sheeting to guarantee that the plants are in fact considered to be growing in an *עציץ שאינו נקוב*.<sup>9</sup> In modern Hebrew, produce which is grown in this manner is known as being from a "*מצע מנותק*" (disconnected bed), and will often be labeled as such.

As an aside to this discussion it is worth noting that (a) most *Poskim* hold that the *bracha* on produce of an *עציץ שאינו נקוב* is *shehakol*<sup>10</sup> but (b) such produce may be used for *marror* at the *Seder*.<sup>11</sup>

### זורע בבית

*Yerushalmi*<sup>12</sup> is unsure as to whether foods that grow in a house (*זורע בבית*) are subject to the halachos of *shemittah*, and there is a debate in the *Acharonim* as to what the halacha is. Rav Ovadiah Yosef<sup>13</sup> accepts the ruling of *Pas HaShulchan*<sup>14</sup> who is lenient, since the obligation of *Shemittah* nowadays is merely *d'rabannan*. Others,<sup>15</sup>

<sup>7</sup> *Chazon Ish* *ibid.* and 20:5.

<sup>8</sup> Among the details are the type of material used in the "flowerpot", whether leaves hang over the sides of the pot, and the size of any holes in the flowerpot. The details of these halachos are beyond the scope of this document, and for our purposes, we will assume that during *Shemittah* this produce qualifies as an *עציץ שאינו נקוב*.

<sup>9</sup> The *Badatz* is not sure that a layer of plastic suffices, and therefore requires that the greenhouse's floor be lifted off the ground and that there be a double layer of plastic (*Teshuvos V'hanhagos* IV:258 pages 272-274).

<sup>10</sup> *Chayei Adam* (51:17 & *Nishmas Adam* 152:1) (see also *Yechaveh Da'as* 6:12 and *Machzeh Elyahu* 28), as opposed to *Responso Shevet HaLevi* I:205 (on *Magen Avraham* 204:4). See the coming footnote.

<sup>11</sup> Rav Yosef Ephraim, in a letter dated תשס"א (Adar 5761/March 2001), cites this from *Chazon Ish* (*Kilayim* 13:16) and *Iglei Tal* (*Dash* 8:4), who in turn deduce it from *Gemara Pesachim* 35b (which is discussing *matzah*). These *Poskim* do not mention *Chayei Adam* cited in the previous footnote, but it is noteworthy that *Iglei Tal* holds that *Gemara Pesachim* is arguing on one of *Chayei Adam's* *Yerushalmi* sources. Thus, it would appear that *Iglei Tal* would consider the two statements in the text to contradict one another.

<sup>12</sup> *Yerushalmi, Aritah* 1:2.

<sup>13</sup> *Torah Shebal Peh* Vol. 42, pages 28-29 ff. In addition, on page 33, Rav Yosef argues on *Chazon Ish* cited in the coming text as to whether the greenhouse has to be detrimental to the growth of the produce.

<sup>14</sup> The body of *Pas HaShulchan* 20:23 quotes *Yerushalmi's* uncertainty, and the ruling given here in the text is from his commentary, *Beis Yisroel* 20:52.

<sup>15</sup> *Halichos Sadeh* 5752, pages 21-22 (Rav Elyashiv), *Teshuvos V'hanhagos* IV:258, page 271 (Rav Shternbuch), and *Minchas Shlomo* I:4:1, I:5:7 & III:58:5 (Rav Auerbach).

<sup>5</sup> See for example *Rambam, Hil. Terumos* 5:14-16.

<sup>6</sup> *Chazon Ish, Shevi'is* 22:1 & 26:4. See also *Minchas Shlomo* I:41:4 who suggests other reasons and proofs to be lenient.

however, follow *Chazon Ish*<sup>16</sup> who takes a stricter approach regarding items grown in a house.<sup>17</sup> *Chazon Ish* adds that he personally would assume that the same stringency should apply even if the pots are also an עצץ שאינו נקוב but says that one should not protest those who are lenient in that case.

At first glance, this discussion seems to exactly match the case of produce grown in a fully enclosed greenhouse (where the plants are also in an עצץ שאינו נקוב, as above), and such items should be free of *Shemittah* concerns according to the lenient opinions. However, many contemporary *Poskim* argue with this comparison based on *Chazon Ish's* analysis of the *Yerushalmi*.

*Chazon Ish*<sup>18</sup> reconciles *Yerushalmi* with *Mishnah Shevi'is* 2:4 by suggesting that *Yerushalmi* only considers that one may plant in a house during *Shemittah* when doing so is detrimental to the growth of the plants. However, in cases where one covers or encloses a plant in a manner that protects and helps it, there is no question that such plants are included in all restrictions of *Shemittah*. The *Poskim* take a few different approaches in relating this to the greenhouses used nowadays:

- Many say that although modern greenhouses are completely enclosed, their primary role is to facilitate better growth, and therefore they suggest based on *Chazon Ish* that even those who are lenient regarding זורע בבית (with or without עצץ שאינו נקוב) would agree that produce of a modern greenhouse does not qualify for any leniency.<sup>19</sup> Some of those who take this approach are willing to be lenient if there are other mitigating factors.

- Dayan Yisroel Yaakov Fisher<sup>20</sup> agrees to the basic premise of this argument but contends that greenhouse produce is not as tasty as similar produce grown in the traditional manner. Therefore he holds that one may plant in such an environment during *Shemittah*.
- Rav Moshe Shternbuch<sup>21</sup> basically agrees with the strict approach but says that as relates to *maror* one should be lenient on the issue of greenhouse produce rather than eat "regular" romaine lettuce and take a chance of eating bugs (which would be an *issur d'oraisah*).

### Other factors

There are a number of other possible reasons to be lenient regarding greenhouse produce during *Shemittah*, as follows:

#### Sale to a non-Jew

It has been suggested that the "flowerpots" and their contents can be sold to a non-Jew, and non-Jews can do all *melachos d'oraisah* for the plants. Although on the surface this sounds very much like the well-known *heter mechirah* which many reject, the truth is that such a sale on flowerpots and greenhouses avoids the main issues that earlier *Poskim* had with the *heter mechirah*. For this reason, Rav Elyashiv finds this arrangement acceptable if it is done in conjunction with עצץ שאינו נקוב and זורע בבית (as described above).<sup>22</sup> Much of greenhouse produce sold during *Shemittah* with "*Mehadrin*" *hechsherim*, is certified based on this ruling. Rav Vosner<sup>23</sup> agrees to the halachic portion of this position, but argues that (a) exploiting this type of loophole on a grand scale is against the spirit of *Shemittah* and (b) doing so will lead people to erroneously believe that the general *heter mechirah* is acceptable.

Based on this line of reasoning any items produced in this manner would be considered to have been grown in a non-Jew's land and would be subject to the controversy as to whether such foods are subject to *kedushas shevi'is*. [The issue of

<sup>16</sup> *Chazon Ish, Shevi'is* 22:1 and 26:4 takes the stricter approach cited in the text. Some of the sources cited in the previous footnote cite a letter in which *Chazon Ish* permitted farmers to *l'chatchilah* use a greenhouse, where both reasons to be lenient applied (עצץ שאינו נקוב and זורע בבית): the letter is reported to have been publicized in the *Elul* 5739 edition of *Moriah*, but this author was unable to find the letter in that journal.

<sup>17</sup> *Chazon Ish's* reasons to be strict are that (a) *Yerushalmi* posed the question at a time when *Shemittah* was *d'oraisah* and one was required to be *machmir* and (b) even according to the lenient position in *Yerushalmi*, it may be forbidden *mid'rabannan*.

<sup>18</sup> *Chazon Ish, Shevi'is* 20:6.

<sup>19</sup> *Halichos Sadeh* 5752, pages 22-23 appears to hold that modern greenhouses are not detrimental to tomatoes and cucumbers (and presents different positions regarding leafy vegetables). *Minchas Yitzchok* X:116 (Dayan Weiss) and *Minchas Shlomo* III:158:7 seem to hold that greenhouses are not detrimental to any produce.

<sup>20</sup> *Even Yisroel* VIII:74 page 69 s.v. *v'chol*.

<sup>21</sup> *Teshuvos V'hanhagos* IV:258 page 274 s.v. *u'lachar* (and elsewhere) holds that modern greenhouses are not detrimental to tomatoes and cucumbers (but are for leafy vegetables); his position regarding *maror* is noted at the end of that *teshuvah* and in *teshuvah* 259.

<sup>22</sup> *Halichos Sadeh* 5752, page 23, section 4 and page 24, point 4.

<sup>23</sup> *Shevet HaLevi* VI:167, VIII:245, IX:237-238 and X:199; also see his postscript to *Halichos Sadeh* *ibid*.

*kedushas shevi'is* is beyond the scope of this document.]

### Location of the greenhouses

The question of greenhouse produce of *Shemittah* was first addressed by *Poskim* in previous *Shemittos* when the bulk of this type of farming was done in *Gush Katif*. This situation presented an additional consideration as *Gush Katif* is located in an area that may be out of the halachic borders of *Eretz Yisroel* (as relates to *Shemittah*). At the time, different *Poskim* weighed in as to whether this was a contributing factor.<sup>24</sup> Since then, the Israelis have chosen to abandon *Gush Katif*, and this issue has become moot.

### Insect-free produce

As noted earlier, some *Poskim* who are otherwise strict on greenhouse produce during *Shemittah*, are inclined to be lenient as relates to the use of romaine lettuce for *maror* so as to help consumers avoid the *issur d'oraisah* of eating bugs.

### Summary

We have seen that there are quite a number of reasons to permit greenhouse produce during *Shemittah*. The following is a summary of the final conclusion of the contemporary sources we have cited, and are roughly listed in order of strictness (starting with the most lenient):

- Rav Yosef permits greenhouse produce in all cases since it grows indoors.
- Dayan Fisher is inclined to permit all greenhouse produce since it grows indoors, and says that if it is also an **עציץ נקוב שאינו נקוב**, then it is surely permitted.
- Rav Auerbach is lenient if the pots are also an **עציץ שאינו נקוב**.
- Rav Elyashiv is only lenient in the limited cases where the greenhouse is detrimental to the growth of the produce, the “pots” are an **עציץ שאינו נקוב** which is sold to non-Jews, and all *melachos d'oraisah* are performed by non-Jews.
- Rav Vosner agrees with Rav Elyashiv on halachic grounds, but holds that it is improper to rely on this rationale on a large scale.

<sup>24</sup> *Halichos Sadeh* 5752 pg. 22 s.v. *u'bidvar* holds that the location is not even a factor towards being lenient, while *Teshuvos V'hanhagos* IV:258 pg. 270 s.v. *v'hinei* (and elsewhere) takes exactly the opposite approach.

- Rav Shternbuch permits leafy vegetables from areas that may be outside of the halachic borders of *Eretz Yisroel* (e.g. *Gush Katif*) if it is not possible to purchase bug-free produce from non-Jews. [It is not clear whether he would be lenient nowadays when the produce no longer comes from *Gush Katif*.]
- Dayan Weiss appears to hold that it is improper to use greenhouse produce under any circumstances.



## Fatty Acid Primer

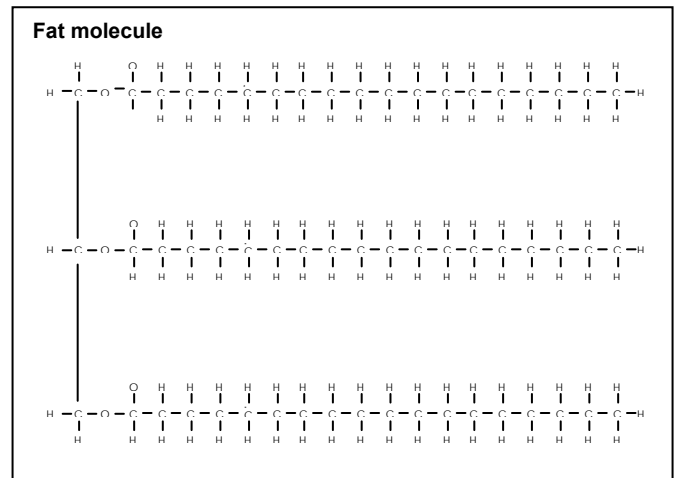
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*The following is a transcript of Rabbi Price's presentation at the cRc Kashrus Seminar on December 27, 2007*

### What is a fatty acid

All fats and oils have a similar structure, which is shown in the diagram. The structure has 4 parts – three horizontal strips and one vertical spine, that together look like an elongated letter “E”.

There is a way to “split” the fat to separate these four components from one another; after that split the spine is called glycerin/glycerol and the horizontal strips are called fatty acids.



Fats and oils share this 4-part structure, and the only difference between particular fats and oils is which fatty acids are connected to their glycerin spine. For example, tallow (beef fat) melts at 130-140° F, palm oil at 120-140° F, cocoa butter at 98° F, and soybean oil is a liquid at room temperature, all because of the different fatty acids they

have connected to the glycerin, but the glycerin (and the structure) is identical in all of them. [As glycerin can come from animal fat, vegetable oil or vegetable oil processed on animal fat equipment, it is clear that glycerin is very kosher-sensitive, but that is not the focus of this discussion].

There are two prime ways of differentiating the fatty acids from one another – chain length and bonds.

- Fatty acids are measured by the number of carbons they contain. The carbon is represented by a “C” in the above diagram, and in that example there are 18 carbons in each of the fatty acids. [For our purposes, we can ignore the H (Hydrogen) and O (Oxygen) that are connected to the carbon chains]. As a rule, the longer the chain is, the more likely it is that the fatty acid (or fat) will be solid at room temperature.
- In our diagram, all of the carbons are connected by one bond (represented by a hyphen in the diagram), but in some fatty acids there is a double bond between two (or more) of the carbons.

Not only do the fatty acids impact the property of the oil or fat they are attached to, but once they are separated from the glycerin they behave differently from one another. Depending on how many carbons and double bonds the fatty acids contain, they may be used in food, soap, flavors, emulsifiers or other applications.

### Animal fat

Animal fat has a whole range of fatty acids in it, and will primarily contain the following three:

- Stearic acid which is a C-18 (i.e. 18 carbons long) with no double bonds.
- Oleic acid which is a C-18 with a double bond between the 8<sup>th</sup> and 9<sup>th</sup> carbons.
- Palmitic acid which is a C-16 with no double bonds.

These fatty acids can also be found in certain vegetable oils, but since they are often derived from animal fat (i.e. בהמה טמאה or נבלה) they are the most kosher-sensitive of the fatty acids.<sup>25</sup> For example,

stearic acid produced in the United States has a high probability of coming from animal fat and surely would not be acceptable without a *Hechsher*, but if it came from Malaysia it would likely be assumed to be kosher as they do not do any splitting of animal fat there and would derive the stearic acid from coconut oil.

These fatty acids are sometimes used “as is”, but may also be found as part of a compound such as magnesium stearate, sorbitan monooleate or vitamin A palmitate. Each of these molecules is a combination of a fatty acid and some other item, and the second half of the name (i.e. stearate, monooleate, palmitate) identifies which fatty acid was used (i.e. stearic, oleic or palmitic).

### Vegetable oil

Vegetable oils have a broader range of fatty acids than animal fats do, and therefore the fatty acids from C-6 through C-14 can be assumed to be from vegetable oil. [Although animal fat may contain a bit of these fatty acids, there is so little of it in animal fat and so much that it is readily available from vegetable oil, that it is not commercially feasible to get these fatty acids from animal sources].

If these fatty acids are always produced from vegetable oil, can we consider them a Group 1? The answer to this is a resounding no, because the same equipment used to split, distill and purify vegetable oil to create these fatty acids is also used to perform the exact same processes on animal fat. The shared equipment is very large, used at high temperatures, and is barely cleaned between products, such that vegetable fatty acids produced on equipment used for animal products are assumed to be non-kosher even *b'dieved*.

As noted above, if these fatty acids are known to come from countries that do not process animal products, such as Malaysia or Indonesia, then they are a Group 1.

### Odd chain lengths

There are very few naturally occurring fatty acids that have an odd number of carbons (e.g. C-15), and the few exceptions are all

<sup>25</sup> It is noteworthy that to avoid the hassle involved in proving that the fatty acids contain no traces of BSE (mad cow disease), many American companies sell all

of their tallow-based fatty acids for non-food use or for food-contact use (e.g. for coatings on dry cereal bags).

found in animal products. These fatty acids of odd carbon chain length are so uncommon that no one goes through the effort to isolate them. Therefore the natural/non-kosher versions are not sold commercially.

However, there are three examples of odd-length fatty acids which are produced from other naturally occurring, even length fatty acids, as follows:

- Oleic acid's double bond can theoretically be split to yield a pair of C-9 fatty acids known as nonanoic or pelargonic acid.
- Ricinoleic acid is a prime component of castor oil, and its double bonds can be split to yield undecanoic acid (C-11) and heptaldehyde (which can possibly be converted to heptanoic acid (C-7).

## Nomenclature

Scientists name fatty acids based on the number of carbons they contain, but in a plant situation they are more likely to be referenced by their "common" name. The following chart gives both the scientific/systematic and common names as well as other information about the common fatty acids:

Systematic Name	Common Name	Chain length	Source
Hexanoic	Caproic	6	Vegetable source but may be processed on non-kosher animal equipment
Heptanoic		7	
Octanoic	Caprylic	8	
Nonanoic	Pelargonic	9	
Decanoic	Capric	10	
Undecanoic		11	
Dodecanoic	Lauric	12	
Tetradecanoic	Myristic	14	Vegetable or animal source
Hexadecanoic	Palmitic	16	
Octadecanoic	Stearic	18	
Octadecenoic	Oleic	18:1	

- (1) C-12 & C-14 are found in small percentage in whole-cut tallow fatty acids, but it is not commercially feasible to isolate them from these sources.
- (2) 18:1 is shorthand for "18 carbons with 1 double bond".

## Miscellaneous

- Fats and oils are called triglycerides because they contain 3 fatty acids attached to a glycerol. After splitting a triglyceride into glycerin and fatty acids, one or two of the fatty acids can be "reattached" to the glycerin to create a molecule known as a monoglyceride or a diglyceride. Clearly, monoglycerides and diglycerides are kosher-sensitive.

- Technically, the term "fatty acid" is reserved for items which come from fat or oil and is therefore limited to C-6 and higher. The term "organic acid" includes similar molecules with smaller chain lengths, and those molecules may be byproducts of fermentations.
- Many of the fatty acids (and organic acids) can and are produced from petrochemicals or are otherwise synthesized in a lab in a manner that poses no *kashrus* concerns.
- Fatty acids from animal or vegetable sources are always straight-chained, and branched-chained products are typically derived from petrochemicals.
- Sometimes a company can produce paperwork on an uncertified fatty acid, which can help a *Mashgiach* determine that it is in fact kosher (in cases of *b'dieved*).
- Occasionally, a chemical that appears to be innocuous turns out to be processed with a non-kosher enzyme or some other "surprise" ingredient and it is therefore wise to investigate natural raw materials.



EXPERIENCE

## Identifying Meat that Was Not Properly Menakar

On December 18, 2007 the OU presented a seminar at Romanian Kosher Sausage in Chicago on *nikkur* for *Rabbonim*, *Mashgichim* and others involved in *kashrus* who had little or no hands-on knowledge of *nikkur*.<sup>26</sup> The goal of the 2 hour seminar was to teach the participants enough about *nikkur* to be able to spot gross errors in which *nikkur* wasn't done to certain pieces of meat. The following is a summary of the most practical points.

Before a piece of meat is salted, certain fats, blood vessels and other items must be removed in a process known as *nikkur/traiboring*. A professional *menaker* can easily tell whether a piece of meat was properly *menakar*, but just about anyone can easily learn to recognize some telltale signs of *nikkur* and notice when a piece of meat is sorely lacking those signs. The coming paragraphs are intended as an introduction which the *Mashgiach* can build on through his own "on the job"

<sup>26</sup> The OU was represented by R' Avrohom Juravel (OU Ingredient Department), R' Seth Mandel (OU Rabbinic Coordinator, Meat Industry), R' Fishel Zimmerman (OU *Mashgiach* and *menaker* at Romanian), and the coordinator of the seminar, R' Avrohom Stone (OU Senior *Mashgiach*).

experience. It goes without saying that if, as time goes on, a *Mashgiach* notices a piece of meat that does not appear to have had proper *nikkur*, he should bring it to the attention of an expert *menaker* for evaluation.

### Forequarter/Ribs

Most of an animal's *challeiv* (forbidden fat) is in the part of the animal behind the diaphragm. To avoid the *challeiv*, it is customary to cut the animal between the 12th and 13th ribs and sell the entire hindquarters as non-kosher.

- The cut should be clean, and none of the fat from the hindquarter should remain attached to the forequarter.
- Channels of fat and blood vessels must be removed from one end of the meat to the other between the 10<sup>th</sup> and 11<sup>th</sup> ribs, 11<sup>th</sup> and 12<sup>th</sup> ribs, and 12<sup>th</sup> rib and the "end". After seeing a few examples of ribs that were properly *menukar*, it is easy to tell if *nikkur* was done. [In this case, as with all of the following examples, only an expert can tell if the *nikkur* was done perfectly, but anyone with a bit of training can tell if the *nikkur* was done reasonably well].
- Unfortunately, there have been cases where the person was *menaker* the wrong end of the meat (between the 5-8<sup>th</sup> ribs instead of the 10-13<sup>th</sup> ribs). To catch such a mistake, one must be able to recognize the different sides of that cut of meat. The large circular piece of meat alongside the 12<sup>th</sup> rib (i.e. the rib-eye steak) has much less fat running through it than the similar meat on the side of the 5<sup>th</sup> rib, and someone who has compared a few samples should be able to make this distinction.

### Liver

- All light pink or white fat should be removed from the surface of the liver (but fat within the flesh may remain).
- One side of the liver is naturally free of fat; by comparing the two sides one can tell whether *nikkur* has been done to the fattier side.

### Skirt

- The skin/membrane covering the skirt (and the fat on top of it) should be removed. [Details of exactly which fat must be removed underneath the membrane are beyond the scope of this document].

### Tenderloin (hanging tender)

The tenderloin is comprised of two halves, which are joined together for most of their length by a layer of fat.

- The skin/membrane covering the tenderloin (and the fat on top of it) should be removed.
- All fat must be removed from the surfaces on both sides of the tenderloin, but the fat holding the two halves together may remain.
- At the bottom of the tenderloin, the two halves split apart completely to take on the shape of the letter "V", and all fat must be removed from the space between the two halves.

