Louis Pasteur (1822-1895), best known as the “father” of microbiology, bacteriology and germ theory, as well as the discoverer of the rabies and anthrax vaccines, was responsible for the prevention of numerous diseases. What is lesser known is that he also invented a process of heating up liquids, which would destroy bacteria and other germs lurking inside, thereby increasing shelf life and preventing these liquids (mainly milk and wine) from causing disease. This process later became known as “pasteurization”, for obvious reasons.

Aside for the health benefits of pasteurization, there potentially might be halachic benefits, as well. It is well known that there is a Biblical prohibition to benefit whatsoever from wine that was poured as a libation in idol worship ("Yayin Nesech"). There is also a Rabbinic prohibition to drink wine that was poured or touched by a gentile ("Stam Yaynam"). This prohibition was extended to include wine that was touched or poured by Public Sabbath Desecrators ("Mechalalei Shabbos B’farhesya").

The Halachic Discourse of Louis Pasteur

By Rabbi Yehuda Spitz
However, there is an important exclusion to this rule: if the wine is cooked (Yayin Mevushal) then even if it was later touched or poured by a gentile, it loses its status of Yayin Nesech, and is permitted to be drunk. There are several reasons advanced by the Halachic Authorities for this exception, among them: 1) Cooked wine is considered substandard and is no longer fit for a libation. 2) Cooked wine is uncommon, and therefore was never considered part of the prohibition. 3) Cooked wine’s taste is inferior to uncooked wines, and is not considered real wine for this purpose.

There is some debate among the authorities as to what level of cooking this wine needs in order to receive Mevushal status. The Shulchan Aruch (Y”D 123, 3) simply states when it gets hot on the fire, implying that it must be at least “Yad Soledes Bo”, when one would pull his hand away from touching it, for fear of getting burned. The Shach (ibid. 7), quoting the Rashba and Ran, however, adds another caveat, that the heat level has to be such that the wine’s volume has to be noticeably reduced due to the cooking. Rav Moshe Feinstein, in several responsae, estimates this temperature to be approximately 175°F. He maintains that once the wine reaches this temperature while being cooked, it is already considered Yayin Mevushal, and we no longer have to worry about the halachic ramifications if a gentile would touch this wine.

There is, however, a third opinion, brought in the Darchei Teshuva and Gilyon Maharsha, that in order to be truly considered cooked, this wine must really be so—
meaning it has to reach its boiling point. Even though water boils at 212°F (100°C), due to its alcoholic content (alcohol has a much lower boiling point than water) the average wine’s boiling point is approximately 195°F. Rav Feinstein maintains that since this opinion is not brought in the Shulchan Aruch or its main commentaries, we are not required to follow it. Other contemporary authorities, nevertheless, do take this opinion into account.

This debate also influences the halachic ramifications of pasteurization. Wine producers are not eager to actually cook, let alone boil their wine, as doing so drastically diminishes its quality and taste, and consequently, and more importantly to them, their profits. And that’s where pasteurization comes into the picture. Since they have to pasteurize their wine anyway for health reasons, if it is also considered mevushal, they can “kill two birds with one stone” and keep the quality (and their profit margins) intact.

Contemporary authorities are divided as to the permissibility of pasteurization being considered cooked. Rav Moshe Feinstein held that the temperature of pasteurization is sufficient to be considered mevushal. Rav Ovadia Yosef agrees that this process satisfactorily meets this requirement.

Rav Shlomo Zalman Auerbach, Rav Ben Tzion Abba Shaul, Rav Yosef Shalom Elyashiv, Rav Menashe Klein and the Tzehlemer Rav, however, are unconvinced, as the vast majority of wine is pasteurized, and therefore cannot be considered uncommon,
as cooked wine is supposed to be\textsuperscript{17}. Additionally, if the wine is flash pasteurized, the evaporated wine is recovered through sealed pipes and therefore is not actually reduced and the taste ends up not significantly altered. Moreover, the majority of wine drinkers cannot distinguish pasteurized wine from uncooked wine. These decisors also take the stringent definition of \textit{mevashal} into account, and therefore maintain that pasteurized wine cannot possibly be deemed \textit{mevushal}.

Other authorities, including the \textit{Minchas Yitzchak}\textsuperscript{18}, the \textit{Shevet HaLevi}\textsuperscript{19}, and Rav Moshe Sternbuch\textsuperscript{20}, maintain a middle ground, albeit each via separate reasoning, that although pasteurization should not be considered cooking to permit consumption of wine touched by a gentile, it nonetheless would be considered as such to permit wine touched by a Sabbath Desecrator, as it only a corollary of the original proscription\textsuperscript{21}.

I can imagine that if he were alive today, Dr. Pasteur would be amazed to find that his works are still being discussed and debated, not just in the halls of science and academia, but even in the hallowed halls of \textit{Batei Midrashim} all over the world. \textit{Hafoch Bah V’Hafoch Bah d’Kula Bah!}

\textit{The author wishes to thank renowned author and educator, Rabbi Yair Hoffman, as his relevant article was the impetus for my interest and research on this topic.}

\textsuperscript{17}alom, ילדות היום ובשלא אבנמי זכר (ר"ד, כ"ו, ס"ק ד) שבמהלך דלא ורשיש שני ודאות כמה שומש אינפמא נפר איבי מבשל, דא.

\textsuperscript{18}אלף מנחת צדק (חלק ל' ס"ק א')

\textsuperscript{19}אלף שבת נחל (חלק ב' ס"ק ז והלכ"א ס"ק ב')

\textsuperscript{20}ש"י, תשביKnife והנהנת (חלק ל' ס"ק א').