

OU STUDY GUIDE

Basics of Kosher Supervision

Prepared by Rabbi Yaakov Luban

*Executive Rabbinic Coordinator
Orthodox Union Kashruth Division*



Nutrition Facts		Amount / Teneur	% DV / % VQ *	Amount / Teneur
Valeur nutritive		Fat / Lipides	10 g	16 %
Per 1 brownie (74 g)		Saturated / saturés 7 g		36 %
pour 1 brownie (74 g)		+ Trans / trans 0 g		
Calories 180		Cholesterol / Cholestérol		0 mg
		Sodium / Sodium		135 mg
		Vitamin A / Vitamine A		0 %
		Calcium / Calcium		2 %

INGREDIENTS: Chickpeas, Water, Chocolate Chips, Dates, Almond Milk, Coconut Oil, Ground Flax Seed, Sea Salt
 INGRÉDIENTS: Pois Chiches, Eau, Pépites De Chocolat, Dates, Poudre De Coco, Graines De Lin Moulues, Sel De Mer

CONTAINS: Nuts
 CONTIEN



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Supervising a company

Imagine that you were asked to supervise a food manufacturer. What would you do to set up proper hashgacha (supervision)?

There are four basic steps to giving hashgacha. After watching “Outer Space Kosher”, you should recognize most of what follows:

- 1. INGREDIENT REVIEW.** Every product is made of ingredients. The first step of supervision is to make certain that all the ingredients used in the certified product(s) are kosher. Some plants are very simple and only use a few ingredients, while others are very complicated and use hundreds or thousands of ingredients.

As part of the application for supervision, a new company must provide a full list of ingredients used in the plant. The kashrus organization must then establish if the ingredients are kosher. If the ingredients are made under reliable supervision, no further investigation is necessary. If an ingredient is not supervised, a kashrus professional must analyze the ingredient to determine if it is kosher.

The OU has a database of tens of thousands of ingredients that have been researched and approved as kosher over the years. When a new company applies to the OU for supervision, we check to see if the ingredients used in the plant are already recorded in our database. If not, we will evaluate whether or not these new ingredients are acceptable.

Evaluation of ingredients requires technical skill. This is because ingredients are often made from sub-units, and in order to decide if an ingredient is kosher, one must investigate all the sub-units as well.

To give a relatively simple example, high fructose corn syrup is a commonly used sweetener in many foods. How is it made?

OU STUDY GUIDE

BASICS OF KOSHER SUPERVISION

High fructose corn syrup is made from corn syrup. Corn syrup is made from cornstarch and cornstarch is made from corn. Each phase of production requires the use of other

ingredients. Sulfur dioxide is used to transform corn into cornstarch. Alpha amylase and glucose amylase are enzymes (substances that speed up chemical reactions) that help convert cornstarch into corn syrup. Xylose isomerase, which is also an enzyme, converts corn syrup into high fructose corn syrup. To determine if high fructose corn syrup is kosher, one must investigate all the different stages and study the ingredients used at each phase of production.

If after careful study it is determined that some ingredients in the plant are not kosher, substitute ingredients that are kosher must be found.

- 2. PRODUCTION PROCESS REVIEW.** A representative of the supervising agency must visit the plant and make sure the company submitted a complete list of ingredients. In addition, he must study how the products are made. This is particularly important if the plant produces kosher and non-kosher or dairy and pareve products. In such instances, it is essential to know what equipment is used for the production of each product. Some products cannot be certified because they are made on non-kosher equipment, unless the equipment is kosherized between uses. If pareve products are made with heat on the same equipment as dairy items, they may have to be labeled O-D (or OU Dairy), even though there are no dairy ingredients in the products.

Food factories use very complicated and sophisticated equipment, and the production process review is made by a specially trained kashrus expert who is very familiar with modern food technology.

- 3. CONTRACT.** Once the kashrus agency determines that a product can be kosher, a special contract is drawn up that specifies which ingredients may be used. In the OU contracts, the list of approved kosher ingredients for a specific plant is called a Schedule A. The contract also lists the certified products and the status of each one (pareve, dairy, meat, fish). This is known as a Schedule B. Sometimes the contract will also include additional requirements. For example, if the plant produces non-kosher products, it may be necessary for a mashgiach (kosher supervisor) to kosherize the equipment after non-kosher use and be present for kosher production.
- 4. INSPECTION.** Once the contract is signed, a specially trained inspector called a mashgiach must visit the plant on a regular basis to make sure that the contract is being enforced. For example, the mashgiach checks to see that all ingredients in the plant are on the schedule A, and only products listed on the schedule B have an OU symbol.

OU STUDY GUIDE

BASICS OF KOSHER SUPERVISION

Can you tell if food is kosher by reading the ingredient panel?

Some people think it is possible to judge the kosher status of a food product by reading the ingredients on the label. This is absolutely not true. Most people don't have the expertise to evaluate each ingredient, but even an ingredient expert cannot always tell if a product is kosher for a variety of reasons:

1. **FIRST**, the product may be made from kosher ingredients, but processed on non-kosher equipment.
2. **SECOND**, the USDA does not require the listing of certain processing aids, such as pan liners and oils that serve as release agents. Though not legally classified as ingredients, these items could nonetheless render the product non-kosher.
3. **THIRD**, many ingredients can be kosher or non-kosher, depending on their source of origin or how they are produced. For example, glycerin and emulsifiers are made from either vegetable or animal oils, and the source will not be indicated on the label. Another example is vegetable oil, which may be non-kosher if made on the same equipment as animal oil.
4. **FOURTH**, many ingredients are listed only in broad terms, with no breakdown of the many complex components that make up the actual item. For example, a chocolate flavor may contain more than 50 ingredients, but the ingredient declaration will list this entire complex of ingredients simply as "Flavors". Without knowing what ingredients are in a flavor, it is not possible to know if it is kosher.
5. **FINALLY**, there are various kosher-related restrictions that may apply, such as Rabbinic prohibitions (such as bishul ahum and gevinas akum) detailed below, Terumah and Ma'aser requirements for Israeli produce and concerns of insect infestation.

There is generally not enough information on the label to enable a person to decide if the product is kosher. That is why it is important to purchase only those products that have reliable kosher symbols.

Is every kosher symbol reliable?

There are over 1000 kosher symbols in use today. Every symbol represents a different Rabbi or kosher supervising agency. Kosher certification is similar to other areas of expertise, such as construction, law, medicine and car repair. In every field, there is a wide range of reliability; some individuals are excellent, others are incompetent and many are in between. For that reason, people generally investigate

OU STUDY GUIDE

BASICS OF KOSHER SUPERVISION

professionals before hiring them. They try to speak to people who have used the services and ask for recommendations. We do not select professionals by simply finding their names in the Yellow Pages.

Many people erroneously think it is easy to perform kosher supervision and any Rabbi can do a good job. After watching "Outer Space Kosher", you know that kosher supervision is very complicated and requires much technical skill.

How do you find out if a kosher symbol is reliable? It is not easy to evaluate a kosher certification, and the best person to ask about symbols is your shul Rabbi who has the right contacts to investigate and guide you in choosing reliable supervision.

To determine if a kosher certification is acceptable, there are at least four things that must be considered.

- 1. STANDARDS:** Every kosher supervision is based on a broad set of standards and requirements. For example, some organizations require a Mashgiach temidi (full-time supervisor) for a kosher restaurant, while others do not. Some Rabbis inspect bakeries once a week, while others visit once every month or two. Certain kosher agencies allow the use of regular milk based on the ruling of Rav Moshe Feinstein zt"l, while others permit only the use of cholov Yisrael. Some organizations require bishul Yisrael for tuna, while others hold it is not halachically necessary. Consumers should consult with their Rabbis to decide what standards are appropriate for them.
- 2. HALACHIC EXPERTIZE:** There are many complicated halachic questions that come up in the course of supervision. If an enzyme is excreted by bacteria grown on a dairy medium, is the enzyme dairy or pareve? Can non-kosher ingredients which have undergone chemical changes (such as fermented products) be used in kosher production. Can resinous glaze (an insect excretion) be used as a coating for kosher candy? Is it OK to use gelatin to clarify apple juice? The OU has a database of thousands of halachic questions and answers rendered by OU poskim over many years. A reliable kosher certification is based on halachic decisions made by competent poskim.
- 3. TECHNICAL SKILL:** The supervising Rabbi must be proficient in chemistry and modern food technology in order to analyze thousands of ingredients and understand the working of sophisticated and complicated pieces of equipment in factories. You wouldn't trust a car mechanic who doesn't know how an engine works. If the Mashgiach or supervising agency is weak in their technical knowledge, the kosher supervision will be greatly lacking.

OU STUDY GUIDE

BASICS OF KOSHER SUPERVISION

- 4. IS THE RABBI A GOOD DETECTIVE?** A major part of kosher supervision is making sure that the kosher rules are being followed. That is why the Mashgiach must make unannounced visits on a regular basis. A Mashgiach can't stay in a factory or restaurant 24 hours a day, and he needs to be like Sherlock Holmes to investigate what occurred in his absence. A person can be very knowledgeable about all the halachic requirements of supervision, but if he is not a good detective, it is easy to pull the wool over his eyes.

Red Flag Ingredients

The OU has a database of hundreds of thousands of ingredients used in foods that are under supervision. The OU has spent years investigating these ingredients. It is not necessary for you to become an expert in these ingredients. However, it is useful for you to be familiar with the following categories of red flag ingredients. By "red flag" we mean that the presence of these ingredients in a product alerts us that we must investigate further, because these ingredients can be kosher or non-kosher, depending on how they are produced. One or more of these ingredients are found in most processed foods. By studying this list, you will have a better appreciation of how complicated kosher supervision is today:

ENZYMES

Enzymes are catalysts. Catalysts are chemicals that promote chemical reactions. They play a key role in the production of many foods and ingredients, such as cheese, baked goods, juice, flavors, wine and other alcoholic beverages.

There are different sources for enzymes. Here are a few of the most common:

- **ANIMAL EXTRACTS:** Lipase, rennet and protease are enzymes extracted from animals, and are generally not kosher.
- **PLANT EXTRACTS:** Papain, bromelain, ficin and amylase are plant extracted enzymes and can be certified kosher. Popular applications of vegetable enzymes range from meat tenderizers to corn syrup.
- **MICROBIAL ENZYMES:** These enzymes are extracted from microorganisms such as bacteria, fungi and yeast. Microbes or microorganisms are single-cell organisms so tiny that millions can fit into the eye of a needle. Microorganisms are living cells, and they produce enzymes, as do all living matter. For commercial use, enzymes are produced in special factories by growing large colonies

OU STUDY GUIDE

BASICS OF KOSHER SUPERVISION

of microbes from which the enzymes are harvested. Enzymes are used by food manufacturers for thousands of different applications (uses). There are hundreds of thousands of microorganisms (these are known as strains), and each one produces a unique type of enzyme that functions in a different way. Scientists have experimented with almost countless microorganisms to identify which enzymes are best for specific tasks.

Microbes are living organisms and require food to survive and grow. The food on which a microbe grows is called a medium. Different microbes will grow better on specific mediums, as microbes can be fussy eaters. Scientists have tested thousands of different mediums to find what medium works best for a specific microbe. Many of the mediums are not kosher, such as animal and fish tissue. For example, a microbe may be grown on dog brain or eel flesh. Therefore, microbial rennet must be certified kosher to insure that the medium on which the microbe was grown was kosher.

Rennet is an important enzyme that is used to convert milk into cheese. Until recently, rennet came from the stomach lining of a calf. Animal rennet is generally not kosher, since the calves are not properly slaughtered by a shochet. Today, much of the rennet in use is microbial rennet, which can be kosher when made with proper supervision.

EMULSIFIERS

Emulsifiers are complex substances that are used in many types of food production. They can perform a number of critical functions, among them acting as a surfactant (reducing the surface tension of a liquid) thus making oil and water soluble. Emulsifiers are critical components in many food items, such as margarine, shortenings, cream fillings, toppings, coffee creamers, whiteners, prepared cake mixes, donuts, puddings, ice cream, frozen desserts, instant mashed potatoes, peanut butter, breakfast cereals, chocolates and candies. Emulsifiers may be listed on the ingredient panel as polysorbates, glycerides, mono and diglycerides, sorbitan monostearates, etc. Emulsifiers are produced from either animal or vegetable oil, and emulsifiers require reliable kosher supervision.

FLAVORS

A critical sector of the food industry is flavor production. Flavors, whether artificial or natural, are components of a majority of products. Flavor production is highly complex and uses raw materials from every imaginable source. Some common kosher-sensitive ingredients used in flavors are fusel oil and oil of cognac (which may be extracted from grape juice), glycerin (derived from animal or vegetable oil) and castoreum and civet (beaver and cat extracts). Natural and artificial grape flavors may contain natural grape juice and grape juice extracts and are labeled artificial or imitation because other flavoring additives are used in the formula.

OU STUDY GUIDE

BASICS OF KOSHER SUPERVISION

Since the ingredient declaration never includes a breakdown of ingredients used in flavors, food items containing natural or artificial flavors require reliable supervision.

VINEGAR

Vinegar is made by fermenting alcohol. There are various sources of alcohol, such as sugar, beets, potatoes, grape juice and wine. Vinegar made from wine or grape alcohol is typically not kosher. Vinegar is commonly used in pickles, ketchup, barbecue sauces and many other foods.

GLYCERIN

Glycerin is used in many foods, such as flavored dairy drinks like chocolate milk, yogurt drinks, flavored water beverages, sports drinks, chewing gum and candy. It serves many functions, which include being a humectant (helps maintain moisture), solvent, sweetener, preservative, filler and thickening agent.

Glycerin is produced by splitting oil molecules, and can thus be derived from animal or vegetable oil. Glycerin which is derived from animal oil is not kosher. The source of glycerin is never identified on a product label, and it is even very difficult to determine the source through lab testing as well.

COLORING AGENTS

Coloring agents are made from many different ingredients. One common coloring agent is Carmine. Carmine is derived from pulverized beetle-like insects. Carmine has a very strong and rich red color and is used in particular to color red cherries which are used in fruit cocktail. Another non-kosher coloring agent is grape skin extract which may be non-kosher, which is often used to give pink grape juice a reddish color. Grape skin extract may be listed on product labels as enocianina.

OILS

Oils are used in numerous foods. Oil can either be animal or vegetable derived. Even 100% pure vegetable oil may be non-kosher because government regulations allow a product to be called pure vegetable oil and still contain a small percentage of animal oil. In addition, vegetable and animal oil are often made on the same equipment.

GELATIN

Gelatin is typically made from non-kosher animal hides and bones, though kosher glycerin is also available. Gelatin is often used to give body and texture to food products, such as yogurt, pudding, whip toppings and marshmallows.

WHEY POWDER

Whey powder is used in countless foods because it is relatively less expensive than milk powder.

OU STUDY GUIDE

BASICS OF KOSHER SUPERVISION

It is used in cereals, breads, cakes, puddings and the like. Whey powder is a byproduct of cheese production, and if the cheese is not supervised, the whey powder may be non-kosher as well.

STEARIC ACID

Stearic acid is used in numerous food products, such as spices, shortenings, margarines, spreads, butters and chewing gums. It is derived from oil, and can be kosher and non-kosher, depending on the source.

Fish

Unlike meat and poultry, fish requires no special preparation. Nonetheless, the fish scales must be visible to the consumer in order to establish the kosher status of the fish. Therefore, filleted or ground fish should not be purchased unless properly supervised, or the fillet has a skin tab with scales attached to the flesh. Furthermore, purchasing fish in a non-kosher fish store is problematic, even if the scales are intact, because the knives and tables are not kosher. Special arrangements must be made to avoid these concerns.

Infestation

Many fruits and vegetables have significant levels of insect infestation and may not be used without proper inspection. Inspecting produce for infestation is known as bedikas tolaim.

Israeli Produce

Before eating Israeli produce (fruits and vegetables), one must separate Terumah and Ma'aser. In addition, every seven years there may be a concern of Shmittah.

Rabbinic Decrees

The following are some of the prohibitions that were enacted by the Tanaim and Amoraim, about 2000 years ago:

BISHUL AKUM

Food cooked by a non-Jew is prohibited by Rabbinic decree, either to avoid socialization which may lead to intermarriage or because of a concern that the non-Jew may use non-kosher ingredients. Food cooked by a Jew is called bishul Yisrael. Excluded from bishul akum are foods that can be eaten raw such as carrots and peas, and food that would not be served at a royal banquet, such as potato chips.

OU STUDY GUIDE

BASICS OF KOSHER SUPERVISION

CHOLOV AKUM

Milk which was not supervised is prohibited for concern that it may be adulterated with non-kosher animal milk. Supervised milk is called Cholov Yisrael. Rav Moshe Feinstein zt"l allowed regular milk in countries that have laws restricting adulteration of milk and government inspection programs, as this is tantamount to supervision. Not all poskim are in agreement with this position. All poskim agree that milk in a third world country where there is no government supervision is cholov akum and may not be consumed without reliable kosher supervision.

GEVENAS AKUM

Hard cheese made without full time supervision is prohibited because such cheeses are typically made with non-kosher animal rennet. Supervision insures that a kosher curdling agent is used instead. Supervised hard cheese is known as Gevinas Yisrael.

STAM YAINOM

Grape juice and wine made without supervision are prohibited because of the likely contact of a non-Jew. These beverages were prohibited because they may lead to socialization and intermarriage with non-Jews.