# Honey, Maple Syrup, and Sorghum

# **Honey**<sup>1</sup>

The revised code defines honey as the nectar and saccharine exudation of plants that has been gathered, modified, and stored in a honeycomb by honeybees.<sup>2</sup> Although unflavored honey (honey) is not considered to be a cottage food, beekeepers producing jars of honey that are composed of 75% of honey from their own hives at minimum will be exempt from the "food processing establishment" licensing, registration and mandatory inspection requirements.<sup>3</sup> Producers who do not comply with the 75% minimum threshold will not be eligible for this exemption and will need to register as a food processing facility. Flavored honey is a cottage food and must comply with the cottage food rules and regulations (see the Cottage Food chapter, page 15).

The Ohio Department of Agriculture is the agency responsible for monitoring both the owners of bees and the sale of honey. Any person owning one or more colonies of bees in Ohio must register with ODA annually and display the designated registration number, regardless of whether they are owned for hobby or commercial processes.<sup>4</sup> In order to ensure hive health and prevent the spread of disease, ODA may enter any premises where hives or honey is stored to inspect and take samples to assess the condition of the hives, honey and the equipment.<sup>5</sup> Hives must be maintained in easily accessible locations with honeycombs available for easy removal.<sup>6</sup> Cross-comb hives or domiciles are prohibited and may be seized if not removed within a year of receiving notification to remove them.<sup>7</sup> Violation of Ohio's apiary laws can lead to license suspension, hive removal, and/or criminal misdemeanor charges.<sup>8</sup>

- 3 ORC 3715.021(A)
- 4 ORC 909.02 5 ORC 909.05
- 5 ORC 909.05 6 ORC 909.12
- 7 ORC 909.12
- 8 ORC 909.13, 909.99



USDA has created a voluntary system to set uniform standards for grades of honey. The grading system ranges from U.S. Grade A to U.S. Grade C, with a Substandard grade being applied to honey that does not meet Grade C quality. Grading scores will take into account the type of honey, the preparation, the color, the style, the favor, the absence of defects, and other quality factors. Anyone interested in Honey grading should visit USDA's website for more information: ofb.ag/honey

#### Maple Syrup<sup>9</sup>

Maple syrup is the unadulterated liquid food derived by concentration and heat treatment of pure maple sap or by reconstituting maple sugar or maple concrete with water to a density of not less than 66 degrees on the brix scale at 68 degrees Fahrenheit.<sup>10</sup> A maple syrup processor, who boils sap when a minimum of 75% of the sap used to produce the syrup is collected directly from trees by that processor, is exempt from the licensing, registration and mandatory inspection required of other food processing establishments.<sup>11</sup> Note, maple sugar

9 21 CFR 168.140, ORC 3715.24 10 OAC 901:3-46-01

11 ORC 3715.021(A)

<sup>1 7</sup> CFR 1212.9

<sup>2</sup> ORC 3715.01(A)(11), OAC 901:3-46-01(D)

that has been produced by an exempt maple syrup producer will also be exempt under the cottage food list.<sup>12</sup>

USDA has created a voluntary system to set uniform standards for grades of maple syrup.<sup>13</sup> To determine a product's quality, a maple syrup is assessed by looking at factors such as the percentage of solids, color, flavor, and odor. For example, a Grade A maple syrup will have the following qualities:

- No more than 68.9 % solids;
- Good uniform color;
- Good flavor and odor, and intensity of flavor normally associated with the class;
- Is free from off flavors and odors;
- Free from cloudiness, turbidity, sediment, and is clean;
- No deviants for damage. Maple syrup that has been properly inspected for these qualities may show the USDA grade on the label. Anyone interested in USDA grading can find more information on

USDA's website ofb.ag/maplesyrup.

#### Sorghum<sup>14</sup>

Sorghum is the unadulterated liquid food derived by concentration and heat treatment of the juice of pure sorghum cane.<sup>15</sup> A processor of sorghum who processes sorghum juice when a minimum of 75% of the sorghum juice used to produce the sorghum is extracted directly from sorghum plants by that processor, is exempt from licensing, registration and mandatory inspection.<sup>16</sup>

# Regulation for Honey, Maple Syrup, and Sorghum Federal

Anyone who wishes to sell honey or maple syrup should first determine if they are required to register with FDA as a Food Facility by evaluating their facilities, their intended mode of sale, and their activities. According to FDA guidance, the need to register will depend on the activities of the producer. When it comes to maple syrup, while the gathering/harvesting of sap is exempt from registration under the definition of farm, the making of the syrup by concentrating sugar maple sap is a form of processing that may be required to register.<sup>17</sup> For honey, while the activities associated with beekeeping will fall within the farm exemption to registration, if a producer would like to heat honey for pasteurization they may need to register with the FDA.<sup>18</sup>

# State

Exempt producers of honey, maple syrup, or sorghum are exempt from mandatory inspection of their processing facilities, however, producers may request that ODA conduct a voluntary inspection of the processing facilities.<sup>19</sup> Registration for voluntary inspection expires annually on May 1 and will need to be renewed.<sup>20</sup> Producers that wish to sell honey, maple syrup, or sorghum that do not fall within the exemptions described above will be subject to the registration and inspection requirements of food processing facilities. All packaged maple syrup, sorghum, and honey made to be sold to consumers are subject to the food sampling requirements conducted by ODA. Sampling procedures will test for misbranding or adulteration of the product. Sampling of food products can be done at random or under the following circumstances:

- When a food, food additive, or food packaging is subject to a consumer complaint;
- When requested by a consumer whose doctor has identified an organism from the consumer;
- When a food, food additive, or food packaging material is suspected of having caused an illness;
- When a food, food additive, or food packaging material is suspected of being adulterated or misbranded;
- When a food, food additive, or food packaging material is subject to verification of food labeling and standards of identity;
- At any other time the ODA director considers a sample analysis necessary.<sup>21</sup>

In adherence with the revised code, ODA has established tolerance levels for certain substances to be used when determining whether maple syrup, honey, or sorghum is acceptable for human consumption:<sup>22</sup>

- Lead tolerance levels range from 0 to 499 parts per billion.<sup>23</sup> A level of lead greater than 500 parts per billion will be considered adulterated.
- There is zero tolerance for the presence of any antibiotics in any sample of honey or the beeswax of honey. The detection of antibiotics will render the honey as adulterated.
- Coumaphos cannot exceed 100 parts per billion in any honey sample or 100 parts per million in any sample of the beeswax honey. Any presence of coumaphos exceeding these limits will render the honey as adulterated.

ODA sampling is not voluntary and failure to allow ODA to conduct its food sampling procedures can result in a criminal misdemeanor.<sup>24</sup>

<sup>12</sup> OAC 901:3-20-04

<sup>13 80</sup> FR 4853 page 4853-4855, document number 2015-01618 https://www.federalregister.gov/documents/2015/01/29/2015-01618/united-states-standards-for-gradesof-maple-sirup-syrup

<sup>14 21</sup> CFR 168.160

<sup>15</sup> OAC 901:3-46-01(G)

<sup>16</sup> ORC 3715.021(A)

<sup>17 21</sup> CFR 1.227, also see FDA guidance B.1.13 https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-questions-and-answers-regarding-food-facility-registration-seventh-edition. If over half is sold direct-to-consumer with no out of state sales then a producer likely does not need to register with the FDA.

<sup>18</sup> See FDA guidance B.1.19, C.4.3

<sup>19</sup> ORC 3715.024, OAC 901:3-46-02

<sup>20</sup> OAC 901:3-46-03

<sup>21</sup> ORC 3715.02(B)

<sup>22</sup> OAC 901:3-44-01

<sup>23</sup> ODA will issue a warning letter to any producer with food products containing levels between 250 and 500 ppb.

<sup>24</sup> ORC 3715.52, 3715.70, 3715.99

Producers interested in ODA's voluntary inspection should contact ODA's Division of Food and Safety at 614-728-6250.

#### **Facilities and Equipment**

Producers not exempt from mandatory ODA inspection will be required to have facilities and equipment that pass ODA inspection for good manufacturing practices. Production and processing facilities must have walls and a roof that effectively protect processing areas from any weather or animals and vermin (except those involved in production). Floors must be made of concrete, wood or well-maintained gravel with a dirt floor only being acceptable in areas where insects are maintained for the production of the product. Light bulbs must be shielded and coated or otherwise shatter resistant when over processing or bottling equipment. Facilities are required to always have soap, disposable paper towels, and a method to adequately wash hands. Any surfaces that will come in contact with food must be maintained in good repair, be easily cleanable, and cleaned and sanitized prior to use and after any interruption of use. Gasoline, oil, pesticides, and other hazardous materials should never be in areas used to process food.<sup>25</sup> Facilities must have potable water available for handwashing and sanitizing food equipment, with any nonmunicipal water source being tested annually.26

Equipment used to collect and transport maple sap, sorghum juice, or honey must be made with food grade materials and may not be used for any other purpose.<sup>27</sup> Food grade materials are materials that, when in contact with food, will remain safe, durable, free of rust, non-absorbent; and, will not allow the migration of deleterious substances, impart color, odor, or taste to food under normal use.<sup>28</sup> Equipment should be thoroughly washed with a chemical sanitizer in accordance with US EPA's approved manufacturer's label and rinsed with potable water prior to use and air dried and properly stacked for storage.<sup>29</sup> All equipment that comes in contact with food, including hoses, may not be stored on the ground.<sup>30</sup>

Barrels, drums, or other bulk containers used to ship or store products must be made of food grade materials, be in good condition and easily cleanable, be cleaned and sanitized prior to each use, and must be free of water prior to use. No container that has rusted, has lead solder on the food-contact surface, or has previously contained a chemical or other hazardous material such as lead or paint may be used to store or ship maple syrup, honey, or sorghum.<sup>31</sup>

- 25 OAC 901:3-46-0826 OAC 901:3-46-09
- 27 OAC 901:3-46-05
- 28 OAC 901:3-46-01(C)
- 29 OAC 901:3-46-05
- 30 OAC 901:3-46-08(E)
- 31 OAC 901:3-46-07



### Packaging

Packaging for maple syrup, honey, and sorghum must be made of food grade materials, be clean and free of water prior to filling, free from rust or any other material that could damage the contents, constructed with an air tight closing mechanism, and filled with not less than 90% of the package's capacity.<sup>32</sup> Canning containers designed for reuse may be used more than once if they are washed and sanitized, but the closures for the containers may only be used once.<sup>33</sup> ODA also recommends the sanitation of new containers when the container has been loosely wrapped or the source of the container is questionable.

#### Labels

Exempt maple syrup, honey, and sorghum processors must include the following information on the label of each of their products:<sup>34</sup>

- Statement of Responsibility: The name and address of the business of the operation. The address must include the street address, the city or town, the state, and zip code. Additional information such as telephone numbers, web addresses and email addresses are permitted but must not be placed between the ingredient list and the required information for the Statement of Responsibility and cannot be used in lieu of the statement of responsibility.<sup>35</sup>
- Statement of Identity: The common or usual name of the food product that accurately describes the nature of the food or its characterizing properties in bold type font on the principal panel of display.<sup>36</sup> Foods containing only honey must be named honey and may include the source of the honey (i.e. "Clover Honey").<sup>37</sup>

32 OAC 901:3-46-06(A)
33 OAC 901:3-46-06(B)
34 ORC 3715.023
35 ORC 3715.023, 21 CFR 101.5
36 21 CFR 101.3
37 21 CFR 101.3(b)

# Label Example: Honey

# EXAMPLE LABEL OF BASIC LABELING COMPONENTS

Labels must comply with all applicable state and federal regulations. Labeling regulations for a honey processor are the same as those applied to other food processors. All information on the label must be truthful and not misleading. The label example below is just one way to present the required information.

Ingredient List - Most food products are required to have an Ingredient List declaring all ingredients by common or usual name in descending order of predominance by weight. Honey is a single ingredient food; an Ingredient List is not required.

not required. This type of extra information shall

Statement of Responsibility and cannot be used

Ref: ORC 3715.023

Shall include the: **Business** Name Street Address City, State, Zip Code

**Statement of Responsibility** 

city, state, and/or zip code. Ref: ORC 3715.023

Statement of Identity – The Statement of Identity is the name of the food. The name shall be the common or usual name of the food, and shall accurately identify or describe the basic nature of the food or its characterizing properties or ingredients. Foods that have a Standard of Identity must conform to all requirements of the standard. The common or usual name may also include the floral source of the honey, such as "Clover Honey," on the label.



The principal display panel (PDP) is that portion of the package label that is most likely to be seen by the consumer at the time of purchase.

CFR - Code of Federal Regulations

ORC - Ohio Revised Code FPLA – Fair Packaging and

Labeling Act

Ref: CFR 21, Part 101.7; FPLA, Title 15 – Chapter 39, 1453(a) (2) Ref: ORC 3715.023

bottom of the package as it is designed to be displayed.

# Label Example: Syrup

# EXAMPLE LABEL OF BASIC LABELING COMPONENTS

Labels must comply with all applicable state and federal regulations. Labeling regulations for a honey processor are the same as those applied to other food processors. All information on the label must be truthful and not misleading. The label example below is just one way to present the required information.

Ingredient List - Most food products are Statement of Identity - The Statement of Identity is the name of the food. The required to have an Ingredient List declaring name shall be the common or usual name of the food, and shall accurately all ingredients by common or usual name in identify or describe the basic nature of the food or its characterizing properties descending order of predominance by weight. or ingredients. Foods that have a Standard of Identity must conform to all Maple Syrup is often a single ingredient food; requirements of the standard. an Ingredient List is not required except when Ref: ORC 3715.023 using optional ingriedients. Ref: ORC 3715.023 Statement of Responsibility -MAPLE SYRUP Shall include the: **Business Name** Street Address City, State, Zip Code All information in the Statement of Responsibility shall be continuous. If the business name is listed in the local telephone directory, the street address may be omitted or a post office box may be used in it's place. Telephone numbers, website addresses, and e-mail addresses are permitted, but not required. Ref: ORC 3715.023 **OHIO MAPLE SYRUP COMPANY** 280 N. HIGH ST. FLOOR 6 COLUMBUS, OHIO 43215 CFR – Code of Federal Regulations NET WT 8 OZ (227 g) ORC - Ohio Revised Code FPLA – Fair Packaging and Net Quantity of Contents – The term "NET WEIGHT" - or an appropriate abbreviation - may be used Labeling Act

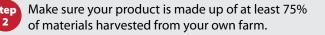
The principal display panel (PDP) is that portion of the package label that is most likely to be seen by the consumer at the time of purchase.

when stating the Net Quantity of Contents in terms of weight. The Net Quantity of Contents shall be declared in both the U.S. Customary System and the SI (metric system). The second declaration shall be stated parenthetically. The quantity of contents shall be placed on the principal display panel. It shall be within the bottom 30 percent of the area of the label panel in lines that are generally parallel to the bottom of the package as it is designed to be displayed.

Ref: CFR 21, Part 101.7; FPLA, Title 15 - Chapter 39, 1453(a) (2) Ref: ORC 3715.023

# **Checklist for Exempt Maple Syrup, Honey, and Sorghum Producers**

Consider voluntary ODA inspection of facilities and be aware of mandatory ODA food sampling authority. Double check the need for FDA Food Facility registration.

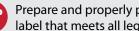




Adopt plans to ensure you have adequate and clean facilities and equipment to handle the products.



Check that all packaging products meet the minimum standards in quality and cleanliness.



Prepare and properly place on all products a label that meets all legal labeling requirements.

- **Ingredient List:** Normally, the ingredients of the food product by their common or usual name should be listed in descending order of predominance by weight (meaning heaviest ingredient is listed first). However, with single ingredient foods such as honey, maple syrup, and sorghum, an ingredient list will not be required.<sup>38</sup> If maple syrup is made with the optional ingredients of salt, or chemical preservatives, an ingredient list will then be required on the label.<sup>39</sup> Flavored honey should be labeled in accordance with the rules found in the cottage food section.
- Net Quantity of Contents: The net weight and volume of the food product in both the U.S. Customary System and the SI metric system should be placed in a prominent and distinct location on a principal display of the food package. When selling maple syrup or honey on site, the label must declare the net weight in the U.S. Customary System (ounces) but it does not need to have the weight in metric (grams). If maple syrup or honey is sold off site, the label will need to provide both ounces and grams. The term "NET WT" or other appropriate abbreviation must be used immediately prior to stating the quantity of food contained within the package (Ex. NET WT 12 OZ (340.19g)).<sup>40</sup> No qualifying phrases should be used in the net quality of contents statement to exaggerate the amount of food (e.g. Net Wt. = 1 Large oz. (5g) is not acceptable).<sup>41</sup> The net weight only includes the average quantity of food within the package and does not include the weight of the packing materials.42

Labels should be glued or secured to the packaging, however, in the event a package is so unusual that a label will not stick, a label may be attached as a card to the package. If the label makes a nutrient content or health claim, then the label must also contain all of the nutritional information in the form of a Nutritional Facts panel as prescribed by federal law.<sup>43</sup>

Exempt maple syrup, honey, and sorghum processors who have undergone voluntary inspection may also place the ODA seal of conformity and inspection on their product's label.<sup>44</sup> Prior to incorporation of ODA seals of conformity and inspection, producers must first submit a sample of their proposed label to ODA for approval.<sup>45</sup> Products bearing the seal without inspection or approval by ODA will be considered misbranded and may be subject to penalties.<sup>46</sup>

Under Ohio law, it is illegal to label or represent a product that resembles honey as being honey when it is in fact not honey.<sup>47</sup> For products that combine honey with other ingredients, labels that include the word honey must indicate

- 38 21 CFR 101.4
- 39 OAC 901:3-45-02
- 40 21 CFR 101.7; FPLA, Title 15 Chapter 39, 1453(a) (2)
- 41 21 CFR 101.105(o)
- 42 21 CFR 101.5(g)
- 43 21 CFR 101
- 44 OAC 901:3-46-04
- 45 OAC 901:3-46-04(E)
- 46 OAC 901:3-46-04(F)
- 47 ORC 3715.38

the existence of other ingredients by prominently displaying the word "blend" or something similar.<sup>48</sup> It is a misdemeanor to misbrand honey.<sup>49</sup>

Further, it is a misdemeanor to indicate that a product is "maple" when the product is not maple syrup, maple sugar, maple cream, or otherwise entirely derived from maple syrup without additional sweetener.<sup>50</sup> Maple syrup processors may add salt, chemical preservatives, or defoaming agents as a processing aid as long as it is listed on the ingredient list.<sup>51</sup> Producers whose standards conform with the USDA grading system may place the grade name on the package label as "U.S. Grade \_\_," and include the full grade name as listed.<sup>52</sup>

Grade A Color Classes	Taste	Light Transmittance (%Tc)
U.S. Grade A Golden	Delicate	>75.0
U.S. Grade A Amber	Rich	50.0-74.9
U.S. Grade A Dark	Robust	25.0-49.9
U.S. Grade A Very Dark	Strong	<25.0

#### Sale

Exempt syrup, sorghum, and honey producers may sell their qualifying products without being licensed as a retail food establishment when the product is sold direct-to-consumer at the following locations:

- Direct to consumers from the site of production,<sup>53</sup>
- at a farm market,<sup>54</sup>
- at a farm product auction,<sup>55</sup>
- at a festival,<sup>56</sup> and/or
- at a farmers market.<sup>57</sup>

#### **Contacts and Resources**

Ohio Department of Agriculture Division of Food Safety Phone: (614)-728-6250 Email: foodsafety@agri.ohio.gov Web: ofb.ag/foodsafety

#### **Additional Resources**

Maple Syrup: ofb.ag/maplesyrupsafety Honey: ofb.ag/honeysafety Syrup and Extract License: ofb.ag/extractlicense

- 48 ORC 3715.38(C)
- 49 ORC 3715.9950 ORC 3715.24, 3715.25, 3715.99
- 51 OAC 901:3-45-03, 901:3-45-02
- 52 OAC 901:3-45-03
- 53 ORC 3717.22(B)(7)
- 54 ORC 3717.22(B)(7) 54 ORC 3717.22(B)(16)(c)
- JH UNC 3/17.22(B)(16)(
- 55 ORC 3717.22(B)(11) 56 ORC 3717.22(B)(15)
- 57 ORC 3717.22(B)(2)(c)