Stanford Dining Sustainable Food Ethos

R&DE Stanford Dining has developed a set of purchasing guidelines and preferences to establish a practical framework and an ongoing process to guide decision making with food sustainability. These guidelines and requirements take into account the best interest of our environment, the social and economic systems on which our food depends, and the health of those to whom we serve food. Our guidelines are informed by the most current science and research available and draw upon the input and involvement of many stakeholders within our campus community with the goal of improving the overall health, safety, security and sustainability of our food supply. We seek to have a thoughtful food purchasing policy that prioritizes food that is healthy, fair, humane, and sustainable. We support the Menus of Change principles (moc.org) and co-lead the Menus of Change University Research Collaborative (moccollaborative.org).

We prefer to purchase food that is:

- **Local:** We prefer food that is grown, raised or processed locally in order to sustain our local economies (especially supporting small and mid-sized farms and companies) and minimize transport, especially of fresh fruit and vegetables. We define three tiers of location: local is within 150 miles, regional is within 250 miles, and statewide refers to California grown produce.

- **Direct:** We prefer to purchase food directly from independently-owned growers, producers and manufacturers. We value knowing who grows our food and having direct relationships with them so that we can improve and learn together. We also prioritize purchasing food from women and/or minority owned businesses.

- **Organic:** We prefer organically, as certified by the USDA National Organic Program, grown food to minimize exposure to harmful pesticides, herbicides, fungicides, and chemical fertilizers for both our customers, farmworkers, pollinators and wildlife, and the environment.

- **Agroecological:** We prefer to source from farms that plant a diverse number of crops, as opposed to a monoculture, and employ agroecological methods of farming that protect and enhance soil health, biodiversity, and protect and preserve ecosystems.

- **Humane:** We prefer meat and dairy products from animals that are treated humanely and allowed to express their natural behaviors. We prefer products that have a third-party humane certification, such as Food Alliance, Global Animal Partnership, and Certified Humane.

- **Raised without Antibiotics & Hormones:** We prefer meat, dairy items, and seafood from animals that were never given hormones or subtherapeutic antibiotics (unless sick and under the advice of a veterinarian). All of our chicken, beef, pork butt, and milk must be raised without antibiotics.
• **Fair:** We prefer food that is grown in environments that treat their workers fairly and respectfully, comply with all labor laws, provide safe work environments, and do not employ slave labor. We prefer Fair Trade certified products over those that are not certified.

• **Sustainable Fisheries:** Seafood must be sustainably raised in a way that allows the fishery to sustain itself for future generations without damaging the environment, overfishing, catching bycatch, or using slave labor. We prefer family fisheries that provide economic growth in their communities. We ensure that all of our seafood is Monterey Bay Aquarium Seafood Watch approved.

### Produce

The way our produce is grown has profound effects on our water, air, land and soil, health, and the health of farmworkers and wildlife and is directly linked to climate change. Stanford Dining prefers to buy produce that is grown with agroecological methods, with preference given to direct relationships with local, organic farms.

**Seasonal:** We prefer fresh, delicious, seasonal produce that has not been treated with fungicides or chemicals during storage.

**Organic:** We prefer organic produce, especially for fruits and vegetables that are grown with large amounts of synthetic pesticides and fertilizers, highly toxic pesticides, or that have high amounts of pesticide residues on the produce. Due to bee pollinator declines in population, we prefer not to buy produce grown with neonicotinoids. See Addendum for list of preferred organic produce.

**Local:** We prefer produce that is grown locally, as produce, as opposed to meat, is often shipped by truck, the most inefficient form of transport. We define three tiers of location: local is within 150 miles, regional is within 250 miles, and statewide refers to California grown produce.

**Agroecological:** We prefer to source from farms that plant a diverse number of crops, as opposed to a monoculture, and employ agroecological methods of farming that protect and enhance soil health, biodiversity, and protect and preserve ecosystems.

**Fair:** We prefer to source from farms that treat and pay their farmworkers fairly and with respect and do not put their workers’ health at risk. We will not buy produce that uses slave labor or similar practices.

**Deliciously Imperfect:** We prefer to source “deliciously imperfect” or “ugly” produce that does not have a market and is usually either plowed under or composted. Significant amounts of resources (water, seed, labor, compost, land, and/or chemicals) are poured into growing these items and it is much better for the environment for them to be used than to
be composted. We launched our Deliciously Imperfect program in July 2015 with a group of 40 small to medium-sized local and organic farms and continue to expand the program.

**Certifications:** We prefer to work with farms that have the following third-party verifications:
- USDA Certified Organic
- Fair Trade
- Food Justice Certified
- Food Alliance Certified

In alliance with the Menus of Change principles “Buy Fresh, Seasonal, Local, and Global” and “Reward Better Agricultural Practices” and “Think Produce First” we seek to increase our produce variety and options and to source thoughtfully and seasonally from local farms who have better agricultural practices.

**Beef**
Cows are intelligent, sentient animals who should be raised in a responsible manner that allows them to express their natural behavior and minimizes stress and discomfort. Cows are naturally inclined to eat grass, not corn, and thus should always be raised on grasslands. Additionally, they are an important part of diverse farms, providing manure and other ecological services. Cows should be raised on grassland, treated humanely, and never be raised on feedlots, which cause environmental problems from manure. In the U.S., 97% of beef comes from conventional production systems. Factory farms usually treat cows with low doses of antibiotics, causing the rise of antibiotic-resistant bacteria and pollution of water systems. Factory farmed cows are also fed other drugs and hormones to increase their growth rate.

- All beef used in entrees must be raised on pasture.
- All beef used in entrees must be raised without hormones or antibiotics.
- All beef should be produced humanely, ideally having a third party certification, such as GAP, AGA Certified Grassfed, Animal Welfare Approved, or Certified Humane Raised and Handled.
- All beef must be fully traceable to the farm it was raised on, as well as the slaughterhouses and processing plants.
Beef should be raised with these standards:

<table>
<thead>
<tr>
<th></th>
<th>Minimum Requirement</th>
<th>Preferred</th>
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</thead>
<tbody>
<tr>
<td><strong>Environment/Housing</strong></td>
<td>Outdoor group housing with shade and or shelter as required depending on climate.</td>
<td>Grass-fed/Pasture-raised</td>
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<tr>
<td></td>
<td>Adequate shade must be provided in hot climates.</td>
<td>Majority of life on pasture.</td>
</tr>
<tr>
<td></td>
<td>Grass-fed/Pasture-raised</td>
<td>Indoor group housing only during wet/icy weather where pasture is unsuitable for grazing.</td>
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<tr>
<td></td>
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<td>Straw bedding provided indoors.</td>
</tr>
<tr>
<td><strong>Stocking Density</strong></td>
<td>Outdoor group housing:</td>
<td>When in indoor housing:</td>
</tr>
<tr>
<td></td>
<td>Paved area- 4.7 m² per cattle</td>
<td>3.3 m²/cattle &lt;100kg</td>
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<tr>
<td></td>
<td>Unpaved area- 23.2 m² per cattle</td>
<td>8.5 m²/cattle &lt;600kg</td>
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<td>11 m²/cattle &lt;800kg</td>
</tr>
<tr>
<td><strong>Livestock Management</strong></td>
<td>No added hormones. No tethering. No routine mutilations. No animal byproducts in feed. No electric goads. Maximum one transportation on a truck prior to slaughter, excluding transport to slaughter.</td>
<td>See minimum requirement.</td>
</tr>
<tr>
<td><strong>Transport &amp; Slaughter</strong></td>
<td>Transport and slaughter should take place with consideration of animal welfare (ideally less than 4 hours)</td>
<td>See minimum requirement.</td>
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<tr>
<td></td>
<td>Design of slaughter facilities must minimize stress to the animals; see Temple Grandin designs.</td>
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<tr>
<td></td>
<td>All animals should be stunned prior to slaughter.</td>
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</tbody>
</table>
In alliance with the Menus of Change principles “Serve Less Red Meat, Less Often” and “Reward Better Agricultural Practices” we seek to buy better (pastured and humanely raised), but less beef.

**Pork**

Pigs are intelligent animals who prefer to live outside. Confined animal operations (about 80% of operations in the U.S.) keep mother pigs in small crates that do not allow them to even turn around. Once they have their piglets, they are transferred to farrowing crates, another cage that does not allow them to move. Pigs produce enormous amounts of waste that is not treated, and in hurricanes or other events, can pollute groundwater and rivers and streams. Similarly, factory farms usually treat pigs with low doses of antibiotics, causing the rise of antibiotic-resistant bacteria.

- All pork used in entrees should be raised humanely, outside for the majority of their lives, and without antibiotics.
- We will not purchase pork from farms that use gestation crates or farrowing crates.

<table>
<thead>
<tr>
<th>Environment/Housing</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Indoor or outdoor group housing, but must have access to outdoors.</td>
<td>Largely outdoors for majority of life.</td>
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<tr>
<td></td>
<td>No sow stalls/gestation crates.</td>
<td>Permanent outdoor free-range access for sows and meat pigs, with ground suitable for rooting, shade/shelter, and wallowing in hot weather.</td>
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<tr>
<td></td>
<td>No farrowing crates. Sows must be given space to move through free farrowing, with nesting and bedding material provided.</td>
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<td></td>
<td>All indoor housing must have manipulable material such as straw bales.</td>
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<td></td>
<td>All pigs must have access to straw bedding.</td>
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<tr>
<td>Stocking Density</td>
<td>For both indoor and outdoor production, gestating sows should have a minimum floor space of 3.5 m², with a minimum lying area of 1.5 m².</td>
<td>See minimum requirement.</td>
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<td></td>
<td>Meat pigs must have the minimum space allowance as follows:</td>
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<td><img src="https://via.placeholder.com/150" alt="Table" /></td>
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</tbody>
</table>
| Livestock Management | No routine mutilations, including teeth grinding or tail clipping.  
No castration without anesthetic.  
No animal byproducts in feed.  
No electric goads. | See minimum requirement. |
| Manure Management  | Farms must have a manure management plan to prevent pollution of groundwater or rivers or streams.                                                                                               | See minimum requirement.  |
| Slaughter         | Must be effectively stunned prior to slaughter.                                                                                                                                                | See minimum requirement.  |
|                   | Traceability must be maintained from farm through to meat product.                                                                                                                           |                           |
In alliance with the Menus of Change principles “Reward Better Agricultural Practices” we seek to buy better (pastured and humanely raised), but less pork.

**Chicken & Poultry**
The U.S. produces almost 9 billion chickens a year, 99% of which are raised in factory farms. Most factory farmed chickens are given subtherapeutic antibiotics to keep them healthy and to grow faster, although the market is starting to change. In fact, 80% of antibiotics in the U.S. are used for livestock, which has led to the emergence of drug-resistant superbugs. At the same time, factory farms are one of the biggest sources of pollution on the planet.

- All poultry used in entrees should be raised humanely and without antibiotics.
- We prefer poultry that is third party certified- either GAP, Certified Humane, or Animal Welfare Approved standards.
- Chickens must not be fed animal byproducts and must be given outdoor access.
- We prefer chickens that are slower-growing breeds than industry standards.

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Environment/Housing</strong></td>
<td>Indoor with natural light and environmental enrichments (perching, pecking objects, straw bales, etc.)</td>
<td>Indoor with natural light and environmental enrichments (perching, pecking objects, straw bales, etc.) + Outdoor access for ½ of life, natural cover/woodland or alternative outdoor cover.</td>
</tr>
<tr>
<td><strong>Stocking Density</strong></td>
<td>Chicken: 30kg/m² or less in house</td>
<td>Chicken: 27.5kg/m² or less in house + 1 m² per bird outdoors</td>
</tr>
<tr>
<td><strong>Livestock Management</strong></td>
<td>Intermediate growth rate breeds or fast growth rate breeds with a leg health plan.</td>
<td>Slow growth breeds.</td>
</tr>
<tr>
<td></td>
<td>No animal byproducts in feed.</td>
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</tbody>
</table>
**Manure Management**

| Farms must have a manure management plan that does not pollute groundwater or rivers or streams. | See minimum requirement. |

**Slaughter**

| Must be effectively stunned prior to slaughter. Traceability must be maintained from farm through to meat product. | See minimum requirement. |

In alliance with the Menus of Change principles “Use Poultry and Eggs in Moderation” and “Reward Better Agricultural Practices” we seek to buy better (antibiotic free and humanely raised), chicken in moderation.

**Eggs**

Most egg-laying hens in the U.S. are confined to battery cages and are confined to about 67 square inches of space each, less than a single sheet of letterhead paper. The hens are not able to spread their wings and are not able to express any of their natural behaviors.

- All eggs, liquid and whole, must be raised without cages and comply with California’s Proposition 2.
- Chickens cannot be raised in combination systems.
- Antibiotics should only be given to treat illness, not subtherapeutically.
- We prefer eggs that are Certified Humane, Animal Welfare Approved, or Food Alliance standards.
- We prefer eggs from chickens that are allowed to range freely outside.
- We prefer eggs from chickens that are fed organic feed.
<table>
<thead>
<tr>
<th>Environment/Housing</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Cage-free</td>
<td>Indoor with natural light and environmental enrichments (perching, pecking objects, straw bales, etc.) + Outdoor access for ½ of life, natural cover/woodland or alternative outdoor cover.</td>
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<tr>
<td></td>
<td>No combi-systems</td>
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<td></td>
<td>Nest boxes (1 per 7 hens)</td>
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<td></td>
<td>May be with or without natural light, with a minimum of 10 lux throughout the house</td>
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<td></td>
<td>Chickens must be given a minimum of six hours of darkness every 24 hours.</td>
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<td></td>
<td>Chickens should be able to express their natural behaviors and should be given perches, litter, scratching areas, and nest boxes.</td>
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</tr>
<tr>
<td>Stocking Density</td>
<td>Stocking density must be less than 9 hens per square meter inside.</td>
<td>Chicken: 27.5kg/m² or less in house + 1 m² per bird outdoors.</td>
</tr>
<tr>
<td>Livestock Management</td>
<td>Intermediate growth rate breeds or fast growth rate breeds with a leg health plan.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No animal byproducts in feed.</td>
<td></td>
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<tr>
<td></td>
<td>No forced molting or beak trimming after 10 days.</td>
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</tr>
<tr>
<td>Manure Management</td>
<td>Farms should have a manure management plan that does not pollute groundwater or rivers or streams.</td>
<td></td>
</tr>
</tbody>
</table>
In alliance with the Menus of Change principles “Use Poultry and Eggs in Moderation” and “Reward Better Agricultural Practices” we seek to buy better (cage free and humanely raised) eggs in moderation.

**Milk**

Cows are intelligent, sentient animals who should be raised in a responsible manner that allows them to express their natural behavior and minimizes stress and discomfort. Cows are naturally inclined to eat forages and grass, not corn, and thus should always be raised on grasslands. Additionally, they are an important part of diverse farms, providing manure and other ecological services. Cows should be raised on grassland and treated humanely. Dairy cows are often fed growth hormones to increase milk production, which causes diseases in the cow and has been linked to cancers and earlier puberty due to excess estrogens and progesterones in the milk.

- All milk (except chocolate milk) must be pasture-raised for the majority of their lives.
- All milk (except chocolate milk) must be organic.
- Local milk is preferred.
- Subtherapeutic antibiotics and growth hormones are prohibited.

Dairy cows should be raised with these standards:

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<tr>
<td></td>
<td>Pasture-based for majority of their lives. When indoors, cows must have access to a bedded lying area sufficient to avoid discomfort. Cows must be given access to shade for hot days and be shielded from the rain. Barns must be open barns, not stalls or tie-ins.</td>
<td>See minimum requirement.</td>
</tr>
</tbody>
</table>
### Livestock Management

<table>
<thead>
<tr>
<th></th>
<th>No tethering.</th>
<th>Male calves born to dairy cows must be utilized for humanely raised veal or beef.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Active program to regularly monitor and reduce lameness, mastitis, poor body condition, and improve longevity.</td>
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<tr>
<td></td>
<td>Animals should be given antibiotics if recommended by a veterinarian for health issues.</td>
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</tbody>
</table>

### Certifications

<table>
<thead>
<tr>
<th></th>
<th>Certified Organic</th>
<th>Certified Humane Animal Welfare Approved GAP Step 4 or above</th>
</tr>
</thead>
</table>

### Dairy Products (Butter, Yogurt, Cheese, etc.)

- Pasture-raised dairy products are preferred.
- Organic dairy products are preferred.
- Local dairy products are preferred.
- The use of subtherapeutic antibiotics and growth hormones is not preferred.

Dairy cows should be raised with these standards:

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### Livestock Management

| No tethering.  
| Active program to regularly monitor and reduce lameness, mastitis, poor body condition, and improve longevity.  
| Animals should be given antibiotics if recommended by a veterinarian for health issues.  
| Male calves born to dairy cows must be utilized for humanely raised veal or beef.  

### Certifications

| Certified Humane  
| Animal Welfare Approved  
| GAP Step 4 or above.  
| Certified Organic  

In alliance with the Menus of Change principles “Reimagine Dairy in a Supporting Role” and “Reward Better Agricultural Practices” we seek to buy better dairy products in moderation.

### Seafood

90% of the world’s fisheries are either fully exploited, over-exploited, or have collapsed. Stanford Dining recognizes that its seafood choices can help protect and preserve at the ocean and environment. We are committed to purchasing seafood that is raised or caught sustainably, legally, and from sources that ensure fair working conditions.

We preferentially source underused and/or invasive species, and mostly lower in the food chain.

We only serve wild-caught salmon from Taku River Reds, a family-run business in Alaska. We pre-pay for the salmon, giving the fishery funds to keep their business model sustainable.

We preferentially source from family-run businesses to help support the economies of coastal communities.

In alliance with the Menus of Change principle “Serve More Kinds of Seafood More Often,” we seek to expand our diners’ palates.

Additionally, we partner with Seafood Watch to ensure all of our seafood is rated “Best
Choice” or “Good Alternative” by its standards.

**Whole Grains & Pulses**
We prefer to purchase grains and pulses (lentils, peas, and chickpeas) that are locally grown if possible, organic, and have fair labor practices.

We purchase only organic red and green lentils and kamut from family farms in Montana from Timeless Natural Food.

We purchase only organic quinoa.

In alliance with the Menus of Change principle “Make Whole, Intact Grains the New Norm,” we strive to serve exciting, delicious whole grain dishes that change diners’ opinions on what a whole grain tastes like.

**FUTURE GOALS:**
*We purchase locally-grown rice that is either organic or grown with ecological farming methods from Lundberg.*

*Other products to look at organic or local: farro, polenta, bulgur, chickpeas, black chickpeas, beans, etc.*

**Tea & Coffee**
All of the coffee we serve is Fair Trade certified from Starbucks.

All of the tea we serve is organic, Fair Trade, and/or Rainforest Alliance certified. We prefer to source tea and coffee from certified B corporations.

In alliance with the Menus of Change principle “Drink Healthy,” we strive to serve a diversity of healthy beverages that have been produced in ecologically sound ways while fairly treating their workers.

**Palm Oil**
Palm oil is often harvested through deforestation of rain forests in Indonesia and Malaysia. Forests are cleared to plant palm oil plantations, which is a major contributor to climate change, biodiversity loss, soil erosion, water pollution, habitat loss for endangered animals, and human rights abuses. Palm oil itself is not the issue, it is how it is produced that is the issue. Palm oil is actually very efficient, it yields more oil per hectare of land than any other crop in the world.
Our goal is that all products using palm oil that we purchase will be sustainably raised and certified by the Roundtable on Sustainable Palm Oil (RSPO).

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Addendum 1: Organic Produce Preferences

Different fruits and vegetables have different numbers or concentrations of pesticides on them. Additionally, some produce has more toxic pesticides than others. We use the Consumer Reports’ Dietary Risk Index and the Environmental Working Group’s Dirty Dozen to analyze which produce should be organic (and pesticide free).

Produce that should be organic, as reported by Consumer Reports’ Dietary Risk Index include:

**Very high risk:**
- Green beans
- Bell peppers from Mexico
- Hot peppers from Mexico

**High risk:**
- Peaches from Chile and USA
- Tangerines from Chile, USA, South Africa, Australia, and Spain
- Plums from Chile
- Nectarines from Chile
- Apples from the USA
- Strawberries from the USA and Mexico
- Cantaloupe from the USA
- Green beans from Mexico
- Sweet bell peppers from the USA
- Hot peppers from the USA
- Winter squash from the USA
- Cucumbers from Mexico and the USA
- Summer squash from the USA
- Snap peas from Guatemala and Peru
- Tomatoes from Mexico
- Sweet potatoes from the USA
- Cherry tomatoes from Mexico

Other items to always buy organic for environmental reasons include:
- Cranberries
- Carrots
Produce that should be organic, as reported by the Environmental Working Group’s Dirty Dozen list:

- Apples
- Celery
- Cherry tomatoes
- Cucumbers
- Grapes
- Nectarines
- Peaches
- Potatoes
- Snap peas
- Spinach
- Strawberries
- Sweet bell peppers
- Hot peppers
- Kale
- Collard greens