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COOKING WITH LENTILS

All About Lentils
Cross Utilization and Menu Plan-Overs
Hummus, Dips, and Spreads
Lentils in the Mediterranean Diet
Popped Lentils
Lentils in a Plant-Based Diet
The Protein Flip
Cooking with Pureed Lentils
Cooking with Lentil Flour
Lentils in Desserts and Sweet Applications

Video demonstrations online at CIAprochef.com

Sausage + Lentil Ragout
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A CIA CONSULTING PUBLICATION
This educational piece was created as an industry service by the Culinary Institute of America and CIA Consulting.
Growing Information

Pulse Plant Characteristics

<table>
<thead>
<tr>
<th>Pulse</th>
<th>Plant Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dry Peas</strong></td>
<td>Plant grows 30-36 inches tall. Contains 4-9 peas per pod.</td>
</tr>
<tr>
<td><strong>Lentils</strong></td>
<td>Plant grows 24 inches tall. Contains 1-3 lentils per pod.</td>
</tr>
<tr>
<td><strong>Chickpeas</strong></td>
<td>Plant grows 15-19 inches tall. Contains 1 chickpea per pod.</td>
</tr>
<tr>
<td><strong>Dry Beans</strong></td>
<td>Plant grows 13 inches tall. Contains 4-7 beans per pod.</td>
</tr>
</tbody>
</table>

Growing Season

- **Planted** early May
- **Harvested in their dry form** mid-August

Growing Regions

- **Bean Growing Regions**
- **Chickpea Growing Regions**
- **Lentil Growing Regions**
- **Pea Growing Regions**
Chef Memories

ZACH MINOT

On my very first day in the world of food television, I helped produce a cooking show featuring lentils. Scanning through the recipes for the episode, I saw that we were preparing a red lentil sabzi, a French lentil salad, and then I was surprised to see that we were going to bake lentil cookies. I had always enjoyed pulses — everything from velvety hummus to rich split pea soup to traditionally stewed lentils. But I’d never tried pulses in baked goods, let alone baked them myself. Naturally, they were amazing. They were spiced with nutmeg, allspice, and cinnamon, and flavored with dried fruits. Frying them for a crunchy texture, I immediately began to seek out other unconventional preparations, but because of my limited exposure as a child (and my tendencies) I tried to avoid eating pulses. But which today you know as the sumptuousness of this stew, I was of a dry, starchy consistency that I no longer avoided but rather embraced. These earthy flavors and creamy textures became a favorite of mine.

DAVID KAMEN

Pulses were not staple menu items in my house growing up. When I was very young, my father quit the piano tuning business and went back to college. When he did this, my mom went back to work to support the family (my two younger brothers, my parents, and myself). Consequently there was not a lot of time to cook on the weekdays. Weekends were busy with errands, activities and household chores so even then the meals were oftentimes quick and easy. Beans did make an appearance on Sunday mornings for breakfast, but these were typically the sweet and smoky canned “Pole-n-Rabin” from whatever brand was on sale. Being the picky eater that I was, I always opted for plain scrambled eggs.

Rebecca Peizer

Having gone to culinary school right after high school, I was exposed to a multitude of pulses in a variety of preparations, but because of my limited exposure as a child (and some remaining food-neophobic tendencies) I tried to avoid eating them as much as possible. It wasn’t until I graduated school and started working in the New York City hotel scene that I discovered the luxurious dish known as cassoulet. My very first experience with the dish was at a now-defunct French restaurant named La Colombe. Oh, I had heard a lot about this restaurant and was excited when a few friends invited me to join them after our shift ended.

SARAH LINKEHL

Entering this rusticly decorated Provençal bistro was an eye opener to the food neophyte I was at the time. Not having a clue what to order, I was encouraged to try the cassoulet. I immediately fell in love with the salty duck confit, pleasantly cheery sautéed a la plancha and braised pork shoulder all bound together in the rich and creamy white bean stew with a crispy breadcrumb and butter topping. Flavor before I had revealed in such a combination of flavors, textures, and aromas.

William Briwa

My mom grew it in our garden and I have made so many memories with it. Now in my garden and it was used as garnish for other pulse dishes as well as the annual Christmas goose.

Blending a half-Israeli, I grew up eating a variety of Israeli recipes based on pulses. Dishes like Falafel, the famous fried chickpea balls, Mujadara, a lentil and rice pilaf with fried onions, and my most favorite, Cholent. The dish we broke Sabbath with every Saturday night.

Sarah Linkenheil

Cholent was the food I felt comfortable forward to most of all as I grew older not only because of the immense amount of time it took to cook this dish, but mostly for the ritual behind it. Made from chickpeas, potatoes, eggs, onions, and what in Yiddish was called fleishen (one of the cheapest cuts of meat from olden days, but which today you know as the premium beef short rib), this meal served four of us for the rest of the weekend for about $10 dollars.

Rebecca Peizer

Bom out of the fact that we did not cook during the Sabbath (as in Jewish tradition it is considered work), this stew would start on Friday before the Sabbath began, with my mother setting me layer by layer the raw meat, eggs, potatoes, onions, and dried chickpeas into a big pot. She would season it, bring it to a simmer and then put it into a very low oven to cook or 12 or more hours. All night, and the following day, the house smelled comforting and safe.

Sophie Egan

My brother and I were always full of excitement, sleeping as though the next day would be Hanukkah or Christmas and the best present we could possibly get would be to dig into the Cholent.

Bill Briwa

For so long, my experience with chickpeas, which clearly hadn’t been given the proper treatment, was of a dry, sandy consistency that left you thirsty. With these ceci, though, I remember being amazed by their incredible texture of both crunchy and creamy, their warmth and freshness, right out of the oven, and the aromatic mix of garlic and fresh sage. This dish really revitalized chickpeas for me, and I have been in love with them ever since.

Sophie Egan

My pivotal moment with pulses came a few years after college when I was home in Seattle visiting my parents. I decided to meet up with an old friend from high school for dinner, and she picked a cozy neighborhood spot called Mopost. While we were perusing the menu, my friend immediately asked the waiter if we could start with the “ceci.” “Start with the ceci!” I said. “Ceci” is Italian for chickpeas, and the appetizer was a small cast iron serving of them, oven-roasted. When they emerged from the waiter’s hand, I was stunned to see these little heads glistening, rubbed in olive oil and decked with sea salt.

David Kamen

They were most definitely the sweet and smoky canned “Pole-n-Rabin” from whatever brand was on sale. Being the picky eater that I was, I always opted for plain scrambled eggs.

David Kamen

I am a Brazilian-born chef, and while growing up in Brazil I was exposed to pulses as much as possible. It wasn’t until I graduated school and started working in the New York City hotel scene that I discovered the luxurious dish known as cassoulet. My very first experience with the dish was at a now-defunct French restaurant named La Colombe. When I was 14 or so, one of my brothers decided to tour Europe by bicycle and, to my delight, he asked me to join. I quickly agreed. We packed our panniers, pumped up our tires, rolled our sleeping bags, and set off on a grand adventure.

Sarah Linkenheil

What was I thinking! A 14-year-old is a minor and deserving of care and protection! It was small consolation that we saw the sights of Europe and experienced its rich and diverse culture. Why? Because for most of the trip I was miserably cold, could not feel my fingers or my toes, and just wished for it to be over.

David Kamen

If there was one fond memory from this dark, frigid interlude it came twice a day as we stopped for our lunch and dinner in small, inexpensive restaurants. While still in Germany, “Erbsensuppe” appeared on almost every menu — a rich, warming, nutty split pea soup offered up with thick chunks of sausage or more often tender smoked ham. With lots of crusty bread and butter the feeling slowly crept back into my extremities, my core thawed, and my spirits lifted.

Sophie Egan

As we moved into Holland the “Erbsensuppe” — my new go-to dish was at a now-defunct French restaurant and was excited when a few friends invited me to join them after our shift ended.

David Kamen

My mom grew it in our garden and it was used as garnish for other pulse dishes as well as the annual Christmas goose.

David Kamen

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What Makes a Pulse a Pulse
—and why you should care

BY SOPHIE EDAN

A subgroup of legumes, a pulse is the dry, edible seed of a plant from the Leguminosae family. Pulses include lentils, dry field peas, chickpeas, and dry beans.

Variety Guide

All pulses are seeds, and all seeds have a remarkable construction in which they are essentially food that exists to get a plant started. Packed with dietary fiber, vitamins, iron, protein, phytochemicals, antioxidants, and other nutrients, pulses are far from humble pods; they are nutritional powerhouses. With all that inherent goodness comes yet more exciting attributes: a wide, vibrant variety to choose from and a world of culinary opportunities.

**Whole Green**
- Flavor: Nutty, earthy
- Uses: Ideal for soups, purées, and baked bean dishes.

**Split Green**
- Flavor: Nutty, dense
- Uses: Good in Mexican dishes, including refried beans and chili con carne.

**Whole Red**
- Flavor: Earthy
- Uses: Great in Italian dishes like pasta and soups.

**Split Red**
- Flavor: Nutty
- Uses: Great in thickeners for soups.

**French Green**
- Flavor: Nutty
- Uses: Popular in French cuisines.

**Black Beluga**
- Flavor: Nutty
- Uses: Great for soups and baked bean dishes.

**Kabuli**
- Flavor: Nutty
- Uses: Ideal for Middle Eastern and Mediterranean cuisines.

**Desi**
- Flavor: Nutty
- Uses: Ideal for Indian cuisines.

**Black**
- Flavor: Nutty
- Uses: Ideal for soups.

**Cannellini**
- Flavor: Nutty
- Uses: Ideal for salads and soups.

**Great Northern**
- Flavor: Nutty
- Uses: Ideal for salads and soups.

**Cranberry**
- Flavor: Nutty
- Uses: Ideal for soups and stews.

**Pinto**
- Flavor: Nutty
- Uses: Ideal for soups and stews.

**Kidney**
- Flavor: Nutty
- Uses: Ideal for soups and stews.

**Navy**
- Flavor: Nutty
- Uses: Ideal for soups and stews.

**Split Yellow**
- Flavor: Nutty
- Uses: Ideal for soups and stews.

**Whole Yellow**
- Flavor: Nutty
- Uses: Ideal for soups and stews.

**Split Green**
- Flavor: Nutty
- Uses: Ideal for soups and stews.

**Whole Black**
- Flavor: Nutty
- Uses: Ideal for soups and stews.

**French Green**
- Flavor: Nutty
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**Split Red**
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Global Inspirations

Even with such a large variety of pulses available, we often overlook that each one has its own unique flavor profile, aroma, texture, and cooking time. Each pulse has its own fingerprint and brings subtle differences to the plate.

The versatility of pulses has allowed chefs and cooks to experiment and create dishes with all flavor profiles and cuisine styles for centuries, with foods that offer great textures and mouth feel, smells and aromas, temperatures from hot to cold, colorful combinations, and of course spicy dishes.

Pulses hit on all of the five main tastes, from sour dishes and pulse salads with vinegar-based dressings, to salty dishes flavored with salt pork, salt cod, or anchovies to dishes cooked with bitter greens like escarole. Some cuisines and cultures even offer sweet pulse dishes, and some global desserts have come into the conversation lately, driven by the globalization and fusion of international culinary trends. Eastern influence brings globalization and fusion of international cuisines while using basic flavor principles from cuisine to cuisine (see list at right).

Pulses have a major place in global cookery, easily combining with flavoring ingredients commonly used within certain cuisines. Pulses can be used in a variety of ways, with several characteristics, applied in many forms, resulting in unique flavors and textures from cuisine to cuisine (see list at right).

Practicing cookery of pulses within global cuisines while using basic flavor principles and characteristics will help cooks to recognize and experience the tastes, flavors, textures, and authenticity of classic international dishes.

Blue Zones: The Pulse of Longevity, Health, and Deliciousness

By Bill Briwa

Hidden in plain sight around the globe, researchers have discovered distinct communities where the local population lives measurably longer lives than most, without suffering the ravages of aging. These wellness anomalies, highlighted on the world map, have become known as the Blue Zones — currently there are five.

1. Sardina, Italy
   Demographers found the largest concentration of male centenarians in the world in small mountain villages.

2. The Islands of Okinawa, Japan
   With a low incidence of cancer, heart disease, and dementia, women here are the longest living on the planet.

3. Loma Linda, California
   Researchers studied a community of Seventh-day Adventists and discovered that they live an extra 10 years compared to the average American nationals.

4. Nicoya Peninsula, Costa Rica
   A Latin American hot spot for longevity where residents are twice as likely to reach 90 compared to Americans, who, on average, live to be 78.8 years old.

5. Icaria, Greece
   One in three lives into their nineties with very low incidence of the diseases that plague modern Americans. Among the lifestyle habits shared by all of the Blue Zones is a vegetable-centric diet. Vegetable-centric dining has been gaining traction in the U.S. for the last 20 years, and for good reason. Vegetables are healthy, colorful, linked to the region and the season, inexpensive, varied in flavor and texture, sustainable, ethical, and highly versatile. It’s encouraging now to see longevity and health research that supports this blossoming trend.

In the Blue Zones, pulses are filling the void as animal protein moves to a supporting role for the sake of health, longevity, and economics. All manner of lentils, chickpeas, peas, and beans make regular appearances on Blue Zone menus offering an inexpensive source of nutrient-dense protein that is readily available, versatile, and satisfying.

In the Sardinian mountain village Blue Zone you might find a humble vegetable soup, akin to minestrone. There is a clever recipe for just such a soup built around a pot of cooked chickpeas. Imagine taking a heavy pot and layering a selection of seasonal vegetables, cut into bite sized pieces, along with cooked chickpeas and their seasoned cooking liquid. Anoint all with good olive oil, cover the pot and bake this until tender and aromatic, 30 to 45 minutes. This soup couldn’t be easier to prepare and welcomes a broad variety of seasonal vegetables as they become available.
It makes good use of the chicpea’s cooking liquid, which should never be discarded as it makes a full-flavored and rich stock substitute.

When exploring Costa Rican cooking, you will quickly discover a foundational dietary truth known as the “three sisters,” a symbiotic approach to growing vegetables. Historically gardens were grown with corn planted between pinto, navy, or other beans, so that the beans could climb the corn stalks like a trellis. The beans, which fix vital nitrogen into the soil, would grow synergistically with the corn — a notoriously heavy-feeder that might otherwise deplete the soil. And squash plants were placed strategically between the rows so that the large leaves would keep weeds down and maintain moisture in the soil. From a nutritional standpoint, beans, corn, and squash seeds (the three sisters) represented ready, quality protein. Even today, pulses define Latin American cooking, appearing daily on menus from breakfast to dinner. It’s not unusual to find a Torta Ahogada (a Mexican “drowned sandwich”) from a street vendor in Mexico, with cooked beans spread across the bread along with cheese, avocados, and pork or fish and grilled vegetables or spread on warm, crusty, grilled bread. What you may not know is that for some the flavor is just too intense. To set this right, try none of Italy or Greece, a staple from the south of France, is a dip forms, whether whole, puréed, flour, or fractioned. One of her favorite ways to prepare beans is in a butterroast and turn boudino, a traditional caramel custard in which she includes a layer of her white kidney beans.

Among a growing list of celebrity chefs celebrating growers is Mehmet Gürs, a pioneering chef in Turkey who uses lentils grown in Thrace. According to Gürs and his New Anatolian Kitchen Manifest: “No Farmer, No Food, No Future,” the consideration that Chef Gürs gives to his lentil grower, who may only sell him one or two sacks of her lentils depending on the quality of the harvest, is to showcase the terroir in which her lentils grow, as well as her story about why she grows her lentils in the first place. Almost 40 years after Chez Panisse opened its doors, the grower, as much as the chef, plays an important role in today’s menus. Pulse growers are driving many current culinary trends, helping to achieve more sustainable food practices, and even introducing us to new dishes, flavors, and cuisines.
Snacking is considered a habit for many in today’s busy world, but it has also become one of the latest trends in food service. Our fast-paced society demands that our eating patterns change to accommodate our schedules. Look at the cashier counter at your favorite coffee shop, corner market, or grocery store and you will find an array of easy-to-consume, grab-and-go offerings that range from snack bars and pastries to sandwiches and smoothies. Typically, these options are not as healthy as one may desire, but they are easy to consume at any time of day, and that is why there is such a high demand for them.

In a food world increasingly interested in a plant-based diet, it seems natural to phase in more healthful choices and start avoiding the usual suspects of the snacking world. Protein-rich and high in fiber, pulses are a natural fit for this category of dining because they offer more nutrients than almost all the other ingredients in these snacks combined.

Granola and snack bars made of nuts, seeds, dried fruits, and chocolate are also very popular grab-and-go items. Lentils can make wonderful additions to a snack bar. When cooked and roasted, they have the similar pleasing texture as nuts and seeds, plus they add an earthy flavor reminiscent of cocoa or chocolate. And because of this, pulses have also found their way into healthier dessert snacks, especially those that contain chocolate. Take the Lentil, Avocado, and Peanut Butter Brownie (recipe on page 30) for instance. It has the same fudgy consistency of the traditional brownie, but without the butter or eggs, and with much more protein. This concept can be taken a step further and the same ingredients can be put into a blender with a banana, some dates, and your favorite juice for a delicious and nutritious beverage.

Aside from satisfying hunger, the particular thing about most snacks that makes them so craveable is their texture. Bags of crispy pretzels and crunchy chips are easy and affordable snacks that can be enjoyed at all times of the day. A great characteristic of certain pulses is that they are able to be cooked a number of ways that change their texture. Depending on the cooking technique, crispy and crunchy textures are easily achievable. Cooked lentils, for instance, can be crisped in a pan with a little oil to create popped lentils that, once cooled, can be seasoned with a variety of seasoned salts that make them just as addictive as any bag of chips. Soaked chickpeas can be fried in olive oil before being seasoned with BBQ spice to become a great snack. Ultimately, the added nutrient density of these snacks satisfies both hunger and the need for craveable texture at the same time. They provide high satiety, especially when compared to traditional snacks.

The market for using pulses in the grab-and-go sector of the food industry is wide open and offers tremendous profitability. If operators are willing to look outside the box of conventional, typical snacks and beverages and look towards pulses to provide both versatility and nutrition, the business opportunity is enormous. Consumers want interesting and healthy food throughout the day. And according to most trend reports in the food industry, snacking as a meal option is not going away any time soon — if ever.
The Protein Flip

BY DAVID KAMEN

Today’s health news is a cacophony of sound bites coming from all angles telling us to increase protein intake but avoid animal protein, and telling us that fat is not as bad as we thought. Except for animal fat. Aren’t all proteins the same?

As consumers become more savvy, they will begin to understand — as many people in food service already do — that there absolutely are differences between types of proteins, fats, carbohydrates, and even calories. This new thinking suggests that the numbers of calories that come from each nutrient group are less important than the quality of the calories from that group. Animal proteins are often associated with saturated fats and do not offer any kind of dietary fiber. Plant proteins are less likely to be associated with saturated fats, and often do contribute dietary fiber, which is just as important a nutrient.

This is not to say that animal proteins are to be avoided. Rather in the climate of changing menus, creating new concepts, and responding to consumer requests for more interesting regional dishes with bigger and bolder flavors, there is an opportunity to consider a Protein Flip.

The Protein Flip is very simply the switching of some or all of the animal protein for plant protein in a dish. While there really is no substitute for a big steak on the plate, the idea is to begin to rethink the plate away from a traditional center-of-the-plate protein.

As Fast Casual 2.0 matures, reinvented sandwich menus are making their way across the industry. Sandwich spreads based on pulse purées are an innovative way to introduce interesting flavors. Fat-based spreads like mayonnaise tend to mask flavors. Pulse spreads themselves can be full of flavor and enhance the identity of the other ingredients.

Swapping pulses for animal protein is not just a health and wellness issue. Using more pulses can provide large cost savings to any operation. In an earlier example, substituting falafel (chickpeas at $0.60/lb) for chicken breasts ($1.30/lb) can save nearly $0.15 per portion. While perhaps not impressive on one portion, the $5.60 savings on 100 portions is significant.

Swapping pulses for animal protein is not just a health and wellness issue. Using more pulses can provide large cost savings to any operation.

Today’s health news is a cacophony of sound bites coming from all angles telling us to increase protein intake but avoid animal protein, and telling us that fat is not as bad as we thought. Except for animal fat. Aren’t all proteins the same?

Swapping pulses for animal protein is not just a health and wellness issue. Using more pulses can provide large cost savings to any operation.
Salads, whose platform is chopped tomatoes and onions, can have hundreds of variations with the addition of beans, mango, corn, and cheese. And nachos, a huge food trend according to Flavor & the Menu, is a platform itself just waiting for traditional salads and exotic ingredients to top each tortilla chip. For soup, the platform is the broth to which any number of noodles, meats, and vegetables can be added. For tomato sauce, and its hundreds of chunky, garden vegetable, cheese, and vodka variations, the platform is the ground tomatoes. And for granola bars, it is the oats, nuts, or seeds to which chocolates, dried fruits, and even trendy chili peppers are added. It is possible to create hundreds of variations of the same idea using these platforms, but it is also possible to use the platforms to create completely different dishes altogether.

Pulses, in their many forms, are perfect to use as a platform in any foodservice operation. They are simple and affordable, and they are a recognizable building block for menu development in any operation.

Pulses are also sponges for the flavors a cook pairs with them. They can be cooked in a flavorful liquid, or blended with herb purées, spices, and flavorful oils. Cooked pulses can also be puréed for hummus, soups, sauces, desserts, and breads. Pulses provide a great source of protein, but also have a longer shelf life in the refrigerator than most animal proteins. They can be cooked fresh for future use once cooked. Examples of pulses as platforms can be seen in some of the nation’s leading restaurant concepts including Mediterranean, Indian, or even Southwestern and African Cuisines.

Excitement can be generated for new preparations by showcasing the bounty of the seasons through Limited Time Offerings (LTOs). Pulses are not seasonal per se, but the ingredients they are offered with offer many opportunities to focus on the local growing season or cutting-edge food preparations. LTOs are — which tracks LTOs around the world and is run by the Datassential, a leading market research company — a pulse consumer benchmark tool that restaurants can use to showcase their platforms in new, seasonal, or innovative ways that appeal to the time of the year or the latest trend. They may also bring back customers seeking what unique preparations will be offered next.

Chickpeas, a fast-casual Mediterranean franchise based in Davis, California, uses chickpeas across their menu in salads, falafels, and most notoriously, their hummus platters. They use chickpea hummus as a platform to offer six different menu options for toppings, such as mushrooms, onions, beans, and grilled meat to top with their hummus, all at different price points. As a franchise, owner-operators may have the ability to offer regional and seasonal flavors that suit the needs of their local customers. For instance, late winter in California is Meyer lemon and blood orange season, which are natural and fresh flavors that could be offered for a limited time. Salads can also take on a seasonal or LTO approach by offering chickpeas paired with tomatoes, grilled eggplant, and cucumbers in summer, and roasted onions and winter squash during the fall. Or, like the pumpkin spice latte served in coffee houses across the nation, perhaps a “Fall Harvest Hummus” that uses chickpea purée as a platform to which roasted pumpkin purée is also added.

Certain food service operations, such as Chipotle Mexican Grill or MOD pizza, run on a Build Your Own (BYO) model, where a platform is wrapped in a blanket of meat at Chipotle, or the pizza crust or salad greens at MOD, allowing patrons to customize their creations. Pulling from any number of fillings or toppings to make it their own. This has been a successful model even on salad bars, where the ingredients are the salad greens are the platform to which dozens of the offerings can be mixed in to fit the customer’s desires and help increase craziness. Pulses are a natural platform for this type of BYO operation because they can be cooked ahead for days of use, are easy to store, and customers can choose to include the flavors and textures they wish and make an exciting meal.

Imagine a BYO Bar that has an array of cooked whole beans, chickpeas, and lentils, as well as an array of pulse preparations like chickpea and lentil hummus as well as pea and bean soups. A Pulse Bar is an approachable BYO option that lets customers take their time and build the perfect meal, be it a salad, snack, or main course. Whole cooked beans, lentils, and chickpeas could be served alongside ingredients like dried beans, chickpeas and lentils, cooked greens, dressings, breads, cheeses, and greens. Of the offerings, they are the hummus section with an array of different pulse purées that have mix-ins such as spice blends from around the world, flavored oils, pestos, and breads for dipping. The hummus bar has had success at restaurants such as Hummus Kitchen in New York and Robata Ema in Chicago where customers choose from an array of toppings for their hummus. The end result would consist of both split pea and black bean soups with mix-ins such as croustons, ham, bacon, sour cream, herbes, and spices. Lastly there could be crunchy pulses for snacking on their own or for use as a topping for texture such as popped lentils, fried chickpeas, and wasabi style peas.

This delivery of pulses also fits very well into an LTO strategy because ingredients the Pulse Bar can change with the seasons and include specialty flavors and ingredients that are only available locally, may fit a certain time of year or may follow the latest food trends. Another top trend according to the trend tracking magazine Flavor & the Menu, is “Chickpeas Go Chic.” They attribute consumer interest in chickpeas to the rise in popularity of the plant-based diet, the blossoming love affair with Eastern Mediterranean, Middle Eastern and Indian cuisines, and forward-thinking menu development of bowl or salad concepts and bar bites. Mediterranean food is known for its wide use of chickpeas, therefore a large batch of this cooked pulse can be used in anything from bar snacks like chickpea fries to salads, hummus, sandwiches, wraps, soups, and entrees.

Another food trend that is good news for the Pulse Platform, as per the National Restaurant Association, is “Authentic Ethnic Cuisine.” These days, consumers are traveling more often and to more exotic places than ever before and they are much more aware of authenticity when they dine at restaurants back home. An example of a pulse-forward cuisine is Indian food, which is well known for its use of lentils. In San Francisco’s Bay area, there is a small chain of authentic restaurants known for their lentil preparations, called Udapi Pula. They use lentils to make their famous dosa pancakes, fried lentil doughnuts called vada, rice and lentil patties called idli, and spicy lentil soup called Sambar (which they serve also as a sauce). A very busy restaurant like Udapi Pula wouldn’t need to cook lentils every day, but rather once or twice a week since lentils are resilient, stable, and do not change in texture or flavor when stored properly.

With so many cuisines around the world — Indian, Korean, African, Mediterranean, Latin American, and more — built around pulses as a primary ingredient, using pulses as a base is a great strategy.
What is a Flavor Sponge?

By Sarah J. Mendell

From the Stone Age to the Middle Ages, and even today, the preparation of pulses has not changed drastically. Traditionally, pulses — lentils, dried peas, chickpeas, and dried beans — were mostly eaten as porridge and oftentimes combined with grains such as barley and wheat. While the result was nutritious and filling, it often wasn’t very flavorful. Animal protein was an expensive and rare addition to peoples’ diet; more exotic ingredients had yet to be introduced to common food culture. Today, it seems hard to imagine indulging in a nutritious bowl of porridge without the exciting addition of produce, spices, or other condiments widely available on the market today.

All pulses, whether lentils, chickpeas, beans, or peas, have their own distinct flavor. Depending on how it is being processed, whether whole or split, the flavor can be heightened or muted. The flavor and texture attributes of various types of pulses vary and are influenced from meaty, bold, and nutty (such as the red kidney bean) to velvety and creamy (found across the entire family of white beans). The larger the bean, the better flavor retention it has when cooked with other ingredients.

Lentils are naturally earthy and robust. Without a seedcoat, split red lentils break down to a pulse consistency when cooked over a short amount of time. Texture plays a very important role in how we perceive flavor. By examining cuisines that heavily rely on pulses, we can determine if it is the pulse or the cooking method that allows for maximum flavor absorption.

Many cuisines around the world use pulses as the center of their plates, relying on their flavor absorbing ability to create a delicious meal. Famous examples include Brazilian feijoada cooked with black beans and smoky pork, Indian dal spiked with curry, or Middle Eastern falafel rich with herbs and garlic. Recipes from these regions offer a bounty of flavor combinations for all kinds of pulses to absorb a vast variety of flavors and ingredients. Baking, stewing, and simmering are the most effective cooking methods for pulses to absorb flavor. They act like a sponge absorbing the cooking liquid. This can be as simple as flavored stocks or even water with basic aromatics like carrot, onion, celery, thyme, garlic, and bay leaves. When using store bought stocks refrain from using those flavors of the product develop slower and with greater depth.

Want to bring the natural flavor of the pulses into the foreground? Pulses can be slow cooked in plain cooking liquids until almost tender and then finished with a flavored seasoning towards the end of the cooking process. This will ensure they are fully cooked and they will still combine with any beautiful flavors added at the end of cooking. Chef Hemant Mathur of Tuti restaurant enjoys cooking lentils with a seasoning of ginger, garlic paste, tomato puree, salt, chili powder, butter, and cream. He says they are so rich and delicious that it is one of the most popular items in his restaurant. This method also works for cold preparations. The pulses are cooked and tossed in vinaigrettes or fresh herbs and spices when warm. The warm temperature helps the flavors evolve and combine with the earthy notes in the pulses. After being cooked, they can then be served on a drizzled salad or as an addition to a leafy greens salad.

Chef Pam Brown, author and visiting instructor at the CIA, says “I really like cooking lentils until they are soft, then combining them with vegetables —

1. LENTIL PASTA PUTTANESCA
2. CHICKPEA SHAKSHUKA
3. POLOS + LENTIL CUSTARD
4. WHITE BEAN ARTISANAL OIL

Lentils are a staple in many cuisines. From the meaty, smoky seasonsings such as za’atar, Parmesan, garlic, malt vinegar powder, or flavored oils can all be added for intense flavor enhancements.

Pulses can also be ground into flours to provide an exciting option to infuse preparations with additional flavor.

Chickpea flour is being used for a variety of staple preparations in parts of Asia and Europe. Paratha is a delicious snack from the South of France. It is made from chickpea flour cooked just like polenta, cooled, cut into a variety of shapes and then fried Italians prepare farinata, an unleavened pancake often served as an accompaniment to salads or sometimes just on its own. It can be used to create thin, nutty sweet wraps which then can be filled with pumpkin puree, avocado, spinach, and quinoa. Blogger Mallika Basu prepares “svada,” light and satisfying chickpea crepes with cilantro, green chilli, and ginger, and serves them as a quick and simple breakfast item.

While there are endless options for using pulses in savory applications, consider using pulse purées and flours for desserts and baking purposes. Guisados de Feijao from Portugal are a popular sweet pastrty made with a filling of white bean puree, butter eggs, sugar, ground almonds, and vanilla. These especially moist and sweet tarts are a delightful treat. Using lentils or black beans for soups and chickpeas for a fall spiced apple cake are wonderful dessert applications using pulses. The smooth texture of pulses opens the pulse base up for any type of flavor absorption.

Using pulse flours as sauce and soup thickeners, for baking, or as binders for vegetable fritters, offers an amazing alternative to the traditional binders while packing dishes with deliciousness and healthy plant-based proteins. Chef Mary Sue Milliken and Susan Feniger of Border Grill in Los Angeles create vegetable fritters with chickpea flour that’s packed with flavors of coriander, cumin, red pepper flakes, turmeric, and cayenne.

In addition to adding extra flavor, common seasonings often paired with pulses help in other ways: Cumin, fennel, ginger, saffron, oregano, and lamb all add flavor and all help with digestion. The amazing ability of pulses to meld with infinite tastes and textures makes them a truly versatile ingredient. Spices, herbs, garlic, lime juice, and onions. Or turn a simple hummus into a delicious dip by adding basil chiffonade, diced cucumber, crumbled feta, and red onions. Smooth purées have an incredible ability to offer great depth of flavor and texture.

Lentil Pasta Puttanesca

RICH FLAVOR
Chicken Stock Olive Oil Garlic

LIGHT TEXTURE
Fresh Herbs

FULL TEXTURE
Stewed Lentils Mirepoix

Parked Cannellini Beans

Butter Fish Stock Lemon Juice Agar-agar

1. NUTTY
2. MEATY
3. VELVETY
4. EARTHY

FLAVOR

TASTING GLOSSARY
1. NUTTY
Classic roasted flavors commonly found in hazelnut, pecan, and toasted butter can also be recreated by carefully roasting pulses.

2. MEATY
Deep, rich, and sometimes deliciously fatty, these flavors can be created with a Mallard-like searing of pulse products.

3. VELVETY
Soft, light, airy, yet rich enough to create a mouthful. Velvety textures are easy to create with pulse purées, especially with the addition of a touch of olive oil.

4. EARTHY
These are moist, organic, nutty, soil-rich flavors often found in vegetables, wild, and, of course, pulses.

5. MUTED
These are soft, delicate, or ‘quiet’ tastes, often put to good use as the foundation for a dish. Muted flavors can play essential supporting roles in a recipe, letting key ingredients shine.

6. CREAMY
Buttery and lightlly creamy in texture, a creamy presence in any dish implies notes from the bottom end of the dairy spectrum.

7. SMOKY
Smoky, earthy, and often reminiscent of meat and fish. Smoky flavors perfectly complement the meaty and earthy tastes common to most pulses.

8. UMAMI
Deeply savory and “mouth-filling” famously difficult to describe, umami is the Fifth Taste. This elusive taste is surprisingly easy to create when cooking pulses gives the proteins they contain.
Transformation Kit

Pulses are one of the most versatile ingredients in the pantry — with the right techniques and the right equipment, you can transform them into an infinite selection of textures and flavors.

1 CRISPING

POPPING LENTILS
Traditionally, lentils are prepared tenderly, slow-cooked in liquid. But once they’re cooked, they can be fried in hot oil providing a popped, crispy pulse perfect for adding crunch and crispness to any dish.

CRISPY WHOLE CHICKPEAS
U.S. diners are most familiar with chickpeas in the form of hummus. However, cooked whole chickpeas can be roasted in the oven at a high temperature, producing a crisp exterior with a creamy, tender interior.

DREDGING WITH CHICKPEA FLOUR
Often cooks dredge their fried foods with flour, but chickpea flour offers an equally crispy, more flavorful option for providing fried foods with a crispy crunch.

2 PURÉEING

BLENDERS
If you look beyond your average food processor, you can achieve truly incredible purées, infinitely silkier than anything you ate growing up. Use a cavitation blender — like a Vitamix — to produce a light, perfectly smooth purée. An added bonus: These blenders are incredibly capable of emulsifying large quantities of oil into the pulse purée. Beyond adding flavor, additional oil can improve mouthfeel and moisture perception.

PACO JET
For the ultimate in smooth purées, professional cooks employ the Paco Jet. This machine requires you to freeze the product and then processes it into a purée smoother than any other technique is capable of producing.

3 THICKENING

LIGHTER IMPACT
Gram for gram, pulses don’t have the same thickening abilities as most starches, but that very property can provide cooks with an incredibly elegant option: adding pulse purées to soups and sauces for great mouthfeel, flavor, and light thickening. A smooth Vitamix-blended pulse purée can delicately tighten a sauce, while split lentils and split peas can provide heartier thickening for soups.

HYDROCOLLOID
Likewise, chickpea flour has been used for decades as a healthy, flavorful, hydrocolloid (liquid thickener).

Transformation Recipes

POPPED LENTILS
YIELDS 1 CUP

INGREDIENTS
Canola oil 2 oz.
Whole green lentils 1 cup
cooked, drained

PREPARATION
Heat a skillet on medium high heat with the oil and add the lentils. Swirl the pan around and toss the lentils in the oil. Season with salt and pepper if desired.

Click here to view recipe video.

CRISPY ROASTED LENTILS
YIELDS 1 CUP

INGREDIENTS
Split red lentils 1 cup

PREPARATION
Soak lentils for 1 hour. Drain water, then roast at 350˚F for 20 to 25 minutes. Cool.

Click here to view recipe video.

LENTIL PURÉE
YIELDS 3-4 CUPS

INGREDIENTS
Split red or whole green lentils, rinsed 1 ½ cups
Water 4 cups

PREPARATION
Bring lentils and water to a boil. Cover and simmer for 7 to 9 minutes for split red lentils, or 20 to 25 minutes for whole green lentils. Drain, reserving the liquid. Add ¼ cup of the lentil liquid back into the lentils. Purée in a blender or food processor until smooth.

Click here to view recipe video.
Pulse FAQs

DO I NEED TO SORT DRY PULSES?
Yes, it’s important to sort through dry pulses before cooking. Using the largest sheet tray you can find, lay them out in a single layer and scan through them to identify any small pebbles or foreign objects. Once sorted, give them a rinse.

TO SOAK OR NOT TO SOAK?
While lentils are quick-cooking pulses, you can shorten the cooking times of beans, whole peas, and chickpeas by soaking them before cooking. Medium sized pulses can absorb over half of their total weight in just two to three hours of soaking. They can absorb a full 100% of their weight over 12 hours of soaking.

SALT OR NO SALT?
Adding salt to the soaking water will actually speed up cooking time, though adding salt to the cooking water can slow the cooking time slightly. Contrary to popular belief, salt will not cause the seed cases to crack. A dilution of 1% works great for pre-soaking (about 10 g/liter or 2 tsp/quart) and helps boost flavor. Additionally, cooking pulses in stock or other rich liquids boosts flavor as well.

WHAT ABOUT ADDING ACIDITY?
Vinegar, for example, helps firm up the seed coat and maintain its form. This is one reason it’s common to find preparations with tomato (high in acidity) and molasses (contains slight acidity along with sugar and calcium that also help to firm up with seed coats in dishes desiring texture). Keep in mind that it’s better to add acidity toward the end of the cooking process; this allows the pulses to cook more quickly and evenly, before the acidity, and remain stronger after cooking.

IS PLAIN TAP WATER OK FOR COOKING PULSES?
Yes, tap water is the most common pulse cooking liquid. If you have particularly hard water — likely with lots of calcium and/or magnesium — you may notice your cooked pulses remain slightly firm after cooking. These minerals can interact with the outer shell and firm them up. It’s not a common problem, but if this is an issue with your water source then the easy solution is to just cook with distilled water instead.

IS THERE A PARTICULAR TYPE OF VESSEL I SHOULD USE?
For the best results, use a wider rondeau to cook a more spread out layer of pulses in liquid. This helps mitigate against the pulses being crushed while cooking and maintain their shape.

WHAT TEMPERATURE SHOULD I USE TO COOK PULSES?
While sorting through your pulses, start them in cold water and gently heat them to 180º-190ºF (80º-85ºC). You want the water hot enough to cook but not turbulent enough to damage the seed cases. For the most even heat application, cook the pulses covered in an oven.

HOW LONG SHOULD I COOK PULSES FOR?
In a phrase — until they’re done. Lentils are a quick-cooking pulse option, ready in between 5 and 20 minutes depending on your variety, whereas other pulses can take up to an hour or two to fully cook depending on any number of variables (pulse type, water content, volume, and more).

PULSES ARE SHELF STABLE, RIGHT?
Can I order them in large amounts?
Dry pulses can be stored in an airtight container, in a cool, dry location for up to one year. After a year, the cooking time required may increase. They can be ordered in large quantities from any foodservice supplier.

Photograph by Monisha Trivedi • Lentil & Sweet Potato Breakfast Sautee
Health + Nutrition of Pulses

BY SARAH DELMONICO

Flavor will always be the biggest factor driving Americans’ decisions about food, but nutrition is just as important. According to the International Food Information Council Foundation (IFIC) Food and Health Survey, 64% of Americans say the healthfulness of food impacts their buying decisions. Pulses have a well-deserved “health halo” for Americans. Adding pulses to a menu increases that menu’s nutrient density, or the quantity of essential vitamins and minerals per calorie. Compared to vegetables and grains, pulses are higher in protein, iron, and zinc. Even whole grains, unrefined grains with the bran and germ intact, are lower in these nutrients than pulses.

Compared to meat, poultry, eggs, seafood and other animal proteins, pulses are lower in calories and saturated fat and are cholesterol-free, making them ideal for customers concerned about their blood cholesterol and heart disease risk. At the same time, pulses provide more fiber, potassium, and colorful phytochemicals than animal proteins. Phytochemicals are naturally occurring substances in plants with properties of plant proteins. Plant proteins are trending for many reasons: sustainability, versatility, flavor, and decision nutrition. Americans are specifically trying to consume more of the nutrients that pulses provide: 64% are trying to consume protein, 60% are trying to consume fiber, 48% are trying to consume potassium, and 12% are even trying to consume prebiotics. Prebiotics are also known as oligosaccharides.

Humans cannot digest these short fibers. While we can’t digest them, the healthy probiotic bacteria in our digestive tracts can, and eating plenty of prebiotics seems to be essential to a healthy microbiota, the overall distribution of microorganisms in the body. Having a thriving, diverse microbiota may reduce risk of allergies and other immune disorders, chronic diseases including heart disease, and may even impact metabolism and the reduce risk of obesity. Much research still needs to be done to figure out all the ways that the microbiota affects health, but prebiotics are clearly a critical part of the story. Pulses are among the best sources of prebiotics.

Unlike grains and grain products including wheat and rye, pulses contain no gluten, making them a great option for customers with celiac disease or gluten intolerance. Pulses also have a lower glycemic index than grains, meaning that when they are eaten, blood sugar rises slowly and doesn’t get as high, an important benefit for those with diabetes or metabolic syndrome.

12% of Americans say they have come to see protein from plant sources as more healthful

71% of Americans say protein from plant sources is healthy, compared to:

42% of Americans say animal protein is healthy

of lentils. All of these factors may contribute to the blood cholesterol-lowering effects of pulses.

The recent IFIC Food and Health Survey reports that 68% of Americans are trying to eat more beans, nuts, and seeds. They recognize the health properties of plant proteins. Plant proteins are trending for many reasons: sustainability, versatility, flavor, and decision nutrition. Americans

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1 gram of fat

20 grams of carbohydrate

about 115 calories

1 cup of cooked pulses

8 grams of fiber

8 grams of protein

Sustainability and Mathematics of Pulses

By Sophie Egan

Between the wizardry of their nitrogen-fixing properties — which improves soil fertility and boosts the productivity of farmland — and their low strain on natural resources, these pockets of protein are the best choice in the quest to healthfully and sustainably feed a growing global population. Consider pulses the all-stars on your menu when it comes to both environmental sustainability and cost-effectiveness.

4.29 oz

Extremely Low Carbon Footprint

2.3 kg of Greenhouse Gas (GHG) emissions per kg of edible product

1.6 kg of GHG emissions per 1000 calories of product

2.0 kg of GHG emissions per 100 grams of protein from product

Relatively Low Water Footprint

58.3 gallons of total water needed to produce each one-ounce serving of dry beans. Of that, 91 gallons of green water (rainfall) and 3.2 gallons of blue water (groundwater, lakes, and rivers).

44.5 gallons of total water — even less — needed to produce each one-ounce serving of dry lentils. Of that, 79.9 gallons of green water and 0.4 gallons of blue water.

Extremely Low Land Use Per Ton of Protein Consumed

<10 hectares per tonne of protein consumed

<1.0 hectare per million kilocalories consumed

Cost and Profit Analysis

$1.11

is the average cost per pound ($0.07 per ounce) of dry pulses to a foodservice establishment. Of course, we do not eat the dry pulses as is — they require cooking. Through this process, the pulse will expand about 3.5 times its dry weight.

4.29 oz

is the average serving size of cooked pulses. To determine the amount of dry product we need to hit this mark, calculate the following equation:

SOAKED WEIGHT/EXPANSION FACTOR:

4.29 oz / 3.5 = 1.23 oz of dry pulses

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So, we need 1.23 ounces of dry pulses to eventually equate to a serving when soaked.

At $0.07 per ounce, the following equation will calculate the average cost of dry pulses per serving:

COST PER OZ* WEIGHT OF SERVING:

$0.07 x 1.23 = $0.09 per serving of dry pulses

To calculate final portion cost, add in seasonings by individual recipe.

SOURCES


IFIC Food and Health Survey 1999-2002.

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SOURCES

Recipe Generator

By Rebecca Peizer

As chefs, how can we get consumers to have the same emotions we have for the products we love? Perhaps you have a favorite seasonal recipe to share. Or maybe the distributor mentioned a price cut on a popular item that was too hard to pass up. Once the product is in the chef’s hands, they must decide what to do with it. This process is referred to as the “PIE Theory of Menu Development.”

First comes the Product: The P. Understanding the products being used in a menu item is key. Where does it come from? How is it grown or manufactured? What are the nutritional benefits? How does it change when prepared or cooked? Perhaps there is a need for new specific type of dish to fit into an already existing menu, whether it is an appetizer, entrée, or dessert. Chefs ponder many dishes at once and then define their favorite components from each. Then they try to put them together into one cohesive plate. For the most part, they follow a process. Good chefs have an intuitive feel for what flavors go well together, like sensory or tactile memory, that is informed by history and tradition or by their own memories. The list of potential flavor combinations is infinite, but people tend to gravitate towards the familiar. They may consult a flavor bible, rely on childhood memories, or previous combinations that have worked, or do some research. Chefs will then think of cooking techniques that are suitable. Is there a technique that best-suits the product? Or is there a need for a certain texture on the menu that isn’t already represented.

In the case of creating a new menu item with pulses, let’s consider using split red lentils. Since these pulses are split, they break down in the cooking process much more easily than their whole counterparts, and have a mild flavor. They are often used for soups in many countries such as Morocco, India, and Greece. This means that they pair very well with spices, and can absorb flavors such as sour lemon or yogurt, pungent garlic and onion, and unctuous proteins such as lamb or shrimp. But they also can be soaked and then roasted to create a crispy garnish. Perhaps they can be featured both in puree form as well as in crispy form for an exciting appetizer, as they seem to be best used as a base for other more complicated ingredients.

The second part in this process is the Inspiration: The I. This is where the chef’s creativity shines through. What is the chef’s style of cooking? What are the current trends in the food industry? What are the traditional uses of the ingredients? There is also a lot of camaraderie between chefs and they tend to bounce their ideas off of one another, often sharing inspiration they’ve had from previous employment. A small batch of the dish in progress may be prepared and the kitchen staff will taste and evaluate the dish with feedback. At this point a chef will be thinking about plating. The plating defines the first impression of the dish to the staff and is intrinsic to the success of the dish in the end.

To continue with creating an appetizer with red lentils, we know that hummus is very popular and trendy these days, as are pickled food and authentic spice blends. Thinking a little outside the box, we could pickle the lentils in a sweet and sour liquid, and then purée them to create a “Pickled Hummus.” In consideration of the seasons, if it were spring, the chef could feature a perfectly grilled slice of Turkish dukkah-spiced lamb to rest on. This creation has crisp and velvety textures, hot and cold elements, and follows the trend and seasons.

The last step in this process is the Execution: The E. This is where discipline is important. The chef will also be thinking of the price point, the variety of other ingredients on the menu, making sure to avoid redundancy, the possibility of cross-utilization of the same ingredients in other menu items, and perhaps how to upsell the dish to customers as an additional menu item, rather than a replacement for other items on the menu.

To finish the red lentil and lamb appetizer, let’s say that everyone has evaluated this dish and has decided that it needs a salty element, as well as something that also adds color and vibrancy to the final dish. A crumble of some hard Greek Myzithra cheese made from sheep and goat milk adds saltiness and a white color contrast, while a single leaf each of parsley and tarragon on each cracker would add color and fragrance to the earthy flavors of the lentils and the lamb. And here, we have created a new menu item called Pickled Red Lentil Hummus and Grilled Dukkah Spiced Lamb with Crispy Lentil Crackers and Myzithra Cheese.

A single dish can make or break the flow of a menu, as all dishes need to work well with one another for the success of the menu as a whole. Following the steps of PIE Theory in order to create a new and exciting dish will allow the chef to maximize profits, and generate excitement with new ingredients and preparations.
ONPULSE ONPULSE

Onion, medium, minced 1 each
Oregano, minced 1 tsp.
Dry red wine 4 oz.
Italian sausage, sweet ½ cup minced

INGREDIENTS
Tomatoes, canned, 3 each
Chicken or beef stock 12 oz.
Pancetta or prosciutto, ¼ cup preferred

Lentil Bolognese

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YIELDS 8 SERVINGS

Ingredients
Canola oil ½ oz.
Parsley or prosciutto, minced ¼ cup
Onion, medium, minced 1 each
Cayenne pepper, with leaves ½ tsp.
Carrot, small, minced ¼ cup
Garlic, cloves, minced 2 each
Butter or ground 1½ cup
White onion, minced 1 each
Garlic cloves, minced 1 each

Lentil & Bulgur Pilaf

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YIELDS 8 SERVINGS

Ingredients
Canola oil ½ cup
Garlic, cloves, minced 1 each
Onion, minced 1 cup
Tomatoes, large, seeded 4 each
Whole green lentils, rinsed 1 cup
Vegetable stock or water 4 oz.
Salt 2 tbsp.
Ground black pepper 1 tsp.
Bay leaf 1 each
Thyme sprig 1 each
Lemon, zest and juice 1 each
Greek yogurt, plain 2 cups
Chili Ultra or Aleppo, ground ½ tsp.
Parsley, chopped as needed

Preparation
Heat half the oil in a 9-inch skillet. Add the pancetta or prosciutto with the onion, celery, and carrots until lightly caramelized, about 10 minutes. Add the heated stock, salt, pepper, bay leaf, and thyme. Stir in the stock and let it simmer slowly until only ¼ liquid has been absorbed, about 20 minutes. Cover and cook at a simmer over low heat until all the meats turn deep brown; drain any excess fat.

Lentil Falafel

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YIELDS ABOUT 20 FALAFEL BALLS

Ingredients
Whole green lentils 1 1/4 cups
Orion, roughly chopped 2 cups
Parsley, chopped 1 cup
Chickpeas, chopped 1 1/2 cups
Dried red hot pepper 1 tsp.
Garlic, cloves 6 each
Cumin 1 tsp.
Aluminum foil (if needed) 2 tsp.
Salt 2 tsp.
Semi-sweet chocolate chips 1 cup
Walnuts, chopped 1 cup
Peanut butter 1 cup
Powdered sugar as needed

Preparation
Preheat oven to 425°F. Heat a skillet with 2 tablespoons of oil and add onion, salt until golden brown and remove from pan. Cook lentil mixture and then add parsley, cumin, and garlic, stir until new mixture is crumbly and texture resembles ground meat. Do not purée smooth. Season to taste with salt and pepper.

Pour batter into greased pan. Swirl in peanut butter. Add in the chocolate chips and the walnuts and fold dispersed.

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Lentil & Avocado Brownie

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YIELDS ABOUT 12 SQUARES

Ingredients
Vanilla beans 1 each
Brown sugar 1 1/2 cup
Salt 2 tsp.
Cilantro, minced 2 Tbsp.
Parsley, chopped ¾ cup
Baking soda ½ tsp.
Baking powder 1 tsp.
Vanilla bean 1 each
Ground black pepper as needed
Baking powder 2 tsp.
All-purpose flour (if needed) ½ cup
Cilantro, chopped ¾ cup
Parsley, chopped ¾ cup
Split red lentils 1 cup
Whole green lentils 1 cup
Canola oil 2 oz.
Water to cover as needed

Preparation
Heat an oven proof skillet with the remaining oil and fry 1 ball to test. If it falls apart, add a little bit of flour. Preheat oven to 400°F. Place the whole green lentils in a large bowl and add enough cold water to cover them by at least 2 inches. Soak for 1 hour. Drain. Place the red split lentils in a large bowl and soak overnight. For a quick soak, place them in a pot covered by 2 inches of water and bring to a boil. Remove from heat, drain and cool.

Add lentils, beet, barley, cashews, bread crumbs, egg, and tomato to the bowl of a food processor. Pulse until mixture is crumbly and texture resembles ground meat. Do not purée smooth. Season to taste with salt and pepper.

Sprinkle in the baking powder, and adjust seasoning to taste and serve warm or chilled.

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SPLIT RED LENTIL & SWEET POTATO HUMMUS

YIELDS ABOUT 2 QUARTS

Ingredients
Sweet potato, peeled and diced 4 each
Garlic cloves 2 each
Water to cover as needed
Tamari 1 Tbsp.
Lime, juice of 2 each
Chinon, minced 2 Tbsp.
Salt as needed
Carrot, ground 1 tsp.

Preparation
Simmer sweet potato and garlic cloves in water until very tender. Drain, reserving liquid. Combine all ingredients in the bowl of a food processor and process with enough potato cooking liquid until a thick and smooth purée is achieved. Adjust seasoning to taste and serve warm or chilled.

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