

nutripro®

NESTLÉ PROFESSIONAL NUTRITION MAGAZINE

Portion Awareness



Playing with
Portions

A Visual Guide
to Plating

Desserts:
Less is More

 **Nestlé**
PROFESSIONAL

a matter of Portions



An Opportunity
On the Plate



It's every chef's dilemma: how to balance what guests want with responsible choices in terms of health, costs, and waste.

As obesity and its risks of diabetes, cardiovascular disease, and cancer continue to rise, people are paying more attention to what (and how much) they eat and drink and the impact on their health. At the same time, many people are dining out more and relying on restaurants to offer guidance with options that fit their lifestyle and health goals.

An important role for chefs

Because chefs set the standards for portion sizes outside of the home, we can have a positive impact on the way people in our communities eat. By leveraging culinary know-how, focusing on quality over quantity, and modeling appropriate portion sizes in every dish, we can shift people's behavior to healthier choices while continuing to keep guests satisfied.

A healthier way to eat

Restaurant meals are often higher in calories and lower in essential vitamins and minerals than meals prepared at home¹—but that doesn't have to be the case. By taking steps like increasing the amount of vegetables in a dish or right-sizing portions, we can improve the way we feed people and make a positive impact on their health.

A more sustainable approach

Another bonus of paying attention to portion sizes is a decrease in food waste, since smaller servings result in less uneaten food destined for the landfill. Reducing waste is important to a growing number of socially conscious restaurants and diners. Cutting back on waste may also help reduce food costs and keep menu prices more stable.

There's no time like the present to rethink portion sizes. Let's head to the kitchen and get started.

In this issue:

Creating a strategy
for the kitchen

Understanding dietary
recommendations

Learning what right-sized
portions look like

Plating tips for new portion
sizes

Creating proper
portion sizes for kids

Adjusting expectations on
the menu and the buffet

Insights on beverages
and desserts

Heart *of the house*

The chef is in charge of the kitchen—the heart of the restaurant. By taking the time to evaluate the menu, update serving standards, and educate staff, it's possible to set all kinds of positive changes in motion.

Set a new standard

Ultimately, controlling portion sizes is the chef's responsibility. By implementing this easy, five-step plan, you can help everyone in the kitchen prepare orders consistently and appropriately.

Step 1

Develop specifications for each ingredient you use. (What size of potato, filet, or bread loaf should be ordered?)

Step 2

Write up standardised recipes that include specific weights and measures of each ingredient. Make sure the tools your staff needs to reproduce those weights and measures are readily available in the kitchen.

Step 3

Create a plating guide with photos or diagrams to model appropriate servings for your culinary crew.

Step 4






Prepare each order by following the recipe and plating guide. Use standardised measuring tools to serve up the food.

Step 5

Make a habit of monitoring actual portions served, comparing them against the standard to train staff, decrease waste, and manage food costs.

How much is too much?

Over the past few decades, serving sizes have risen dramatically. As portions increase, it becomes more difficult for a person to accurately guess how many calories a serving contains, so they end up eating more.² A guest who ordered the same menu item in 1995 and 2015 could easily have doubled the number of calories they consumed, as shown in the comparison below.³

TYPICAL PORTIONS:	 Spaghetti & Meatballs	 French Fries	 Soda	 Coffee Beverage	 Slice of Cake
IN 1995	500 kcal	210 kcal	85 kcal	45 kcal	260 kcal
IN 2015	1025 kcal	610 kcal	250 kcal	350 kcal	640 kcal

Make a plan

It's not necessary to take a radical approach to changing everything at once. Instead, try a long-term plan to gradually reach portion size goals without upsetting guests or disrupting their value perception.

Traditional Portion

Incremental adjustments can be made to any recipe and any portion size.

2.5 Cups Pasta
1.5 Cups Sauce
2 Tbsp Cheese
900 kcal



Year 1: Reduce Portion

Reduce the overall volume of the dish by about 10 to 15%. The difference will generally be hard to notice.

2.25 Cups Pasta
1.25 Cups Sauce
1.5 Tbsp Cheese
775 kcal



Year 2: Adjust Recipe Only

Maintain size while replacing half of the meat in the sauce with diced vegetables to reduce the calories by about 10%.

2.25 Cups Pasta
1.25 Cups Sauce
1.5 Tbsp Cheese
700 kcal



Year 3: Reduce Portion

Reduce the overall volume again and use a wide-rim dish to make the smaller serving seem more abundant.

2 Cups Pasta
1 Cup Sauce
1 Tbsp Cheese
600 kcal



A Visual Guide to Portion Sizes



Understanding the guidelines

Serving appropriate portion sizes begins with knowing what they look like. While guidelines may vary from country to country, some helpful tips are literally right in your hands, as shown on the next page.

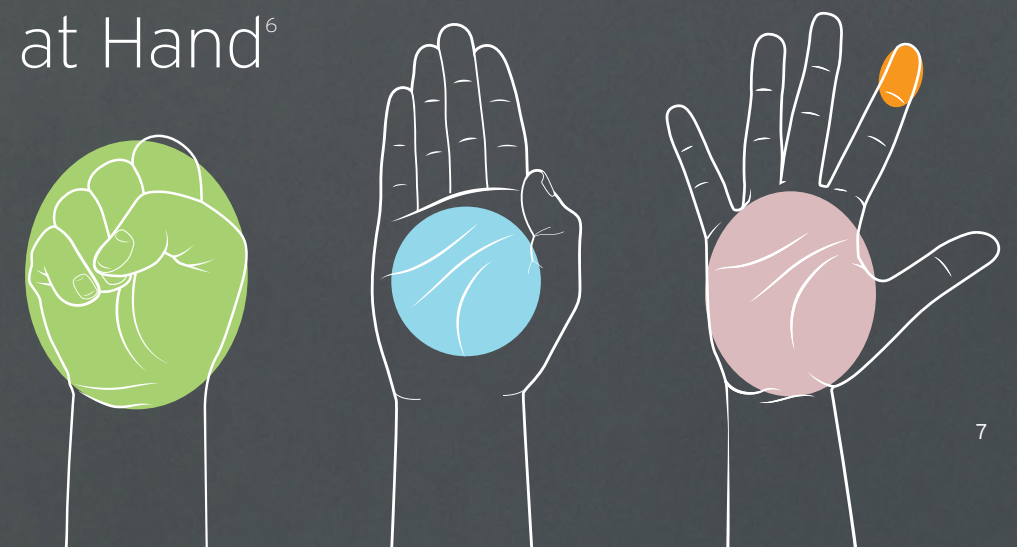
With this in mind, it's also helpful to visualize what a single meal should look like. Various health authorities provide helpful guidance, such as MyPlate in the US and the EatWell Plate from the Food Service Agency (FSA) in the UK. In general, the focus is on increasing vegetables—half of the plate should be made up of fruits and vegetables. Then, another quarter

comes from (preferably whole) grains, and the last quarter from lean protein.^{4,5}

While these models are easy to visualize, controlling portions is more challenging when food groups are mixed together. For dishes like noodle bowls, stews and pasta, standardised measuring tools can help the kitchen keep portions consistent.

Portion Sizes at Hand⁶

- Whole vegetables:**
Size of a fist
- Cooked starches/grains:**
Modest handful
- Cooked protein/meat:**
Size of the palm
- Fats/oils:**
Size of a finger tip



On the Plate

10 Tips for Plating:

One of the challenges of right-sizing portions is meeting the expectations of guests and not compromising on their perceived value equation. Try these clever plating techniques from chefs and researchers to help support a mission of moderation.



Plating to Create Visual Value



- 1 Sauces and Grains
 - Use a smaller or rimmed plate and extend sauces beyond food
 - Leave sufficient space on the rim for wait staff to carry the plate



- 2 Vegetables
 - Highlight vegetables by placing toward the front
 - Use elongated cuts to look more plentiful

- 1 Experiment with plate size to create a perception of visual abundance.⁷
- 2 Make use of wide rims to frame the dish.⁷
- 3 Slice protein and fan pieces across plate.
- 4 Choose elongated, thinner cuts which may make items appear larger.⁸
- 5 Use sauces to create visual value around the edges of the plate, or pour sauce into a small ramekin to emphasize its presence and value.
- 6 Create visual interest with dark or bright sauces on white plates.
- 7 Arrange leafy vegetables to take up space on the plate.
- 8 Instead of one large piece of protein, offer two or more smaller pieces. Multiple items tend to increase the perceived amount of food more than overall size.⁹
- 9 Use firmer textures since the more time food spends in the mouth ("oral exposure") the more it increases satiety and satisfaction.¹⁰
- 10 Decrease the proportion of energy-dense items (e.g. meat, heavy sauces, starches) and increase the proportion of vegetables.



- 3 Meat or Other Protein
 - Slice and fan meat for a larger visual impact
 - Use angled cuts to make each piece appear larger



- 4 Spices and Herbs
 - Garnish with herbs to increase perceived value and freshness
 - Extend garnish to the rim to increase the visual space and impact

On the *menu*

Mastering the menu

Simple ways to offer portion size guidance to guests

While guests inevitably make their own choice of what to eat and drink, what they order is heavily influenced by the layout of the menu. The menu can be constructed to inform, guide and encourage diners toward smaller portion sizes and nutritious options. Here are a few ideas to try:

- Offer choices: smaller portions, half portions, kids' portions, and alternative side dishes.
- Promote sampling, sharing and/or tapas menus for the whole table to enjoy.
- Inform guests by providing simple and transparent nutritional information on the menu.
- Promote healthier items such as vegetable sides or salad by highlighting certain menu items: Chef's recommended pairing, Chef's choice, Signature item, etc.

A sense of connection

The idea of sharing plays into something else diners crave while eating out: a social connection. A full 69 percent of consumers report that dining with friends contributes to a fun, exciting restaurant experience.¹¹ Small plates, samplers, and sharable items can encourage this kind of interactive meal while serving up smaller portion sizes.

A culinary experience

These days, some diners are more interested in exploring the menu than filling their stomachs. One study showed that 70 percent of customers order shareable meals so they can try more than one item on the menu.¹² Offering smaller portion sizes allows them to indulge without overeating. To meet evolving expectations, some restaurants are offering alternative portion sizes, including "bites," samplers, and small plates.

At your service

To promote quality of food over quantity, train service staff to highlight key attributes of each meal. For example, ask them to call attention to specific flavours and textures, or the provenance of special ingredients—whether local or exotic.

On the Buffet

8 Tips on the Line

Having "eyes bigger than your belly" is a common affliction at self-service buffets, which may lead to over-indulgence and food waste. However, there are some buffet line tactics that can help mitigate waste and guide guests towards a balanced plate.

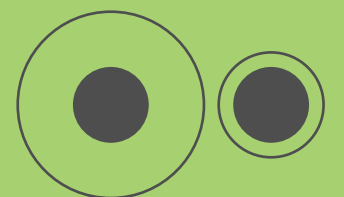
- 1 Offer a variety of plate sizes to give guests options.
- 2 Place vegetables and lighter salads at the beginning of the line so customers will fill their plates with healthier options first.
- 3 Use smaller serving spoons and tongs.
- 4 Place sauces and other condiments in pre-portioned ramekins (which also enhances a premium perception).
- 5 Don't pre-sauce salads and other items.
- 6 Serve vegetables in larger, julienne cuts.
- 7 Present meat in smaller pieces.
- 8 Serve pre-portioned desserts.

TIP

Take a stance on sustainability! A responsible buffet reminds people not to overindulge and be wasteful.

The Delboeuf Illusion

The Delboeuf Illusion illustrates how our ability to perceive relative size is easily skewed. Note how the two dark circles, which are exactly the same size, appear different because of the circles framing them.¹² This may explain why similar portions look larger on small plates and why people tend to overserve themselves on large plates.



smaller Appetites



The Million-Calorie Difference

One man. One cookie. And one million calories saved. This is the story of how Dan Gorman, a food service director in one US school, made a small portion change that added up to an impressive achievement.

"A couple of years ago, we had a 2.5-ounce, 310-calorie cookie that we baked from a dough. Kids could purchase the cookie as a snack every day, and on average, we sold about 30 cookies per day. Using the same dough, we switched to a 1-ounce cookie that has 110 calories.

Some people thought the kids would just buy two or three cookies. We didn't do anything to prevent that, but what we found was that we still ended up selling about 30 cookies per day. The kids didn't buy extras because they were smaller. They were satisfied, and out of habit, they'd still just buy a single cookie.

We're open 175 days a year, so for that building, we saved about a million calories a year just by changing the portion size. Our profit margin also increased from 16 cents on the larger cookie to 20 cents on the smaller one. That adds up to a 25% increase over what we earned before."

Child's Play

Rethinking the kids' menu? These simple ideas can help encourage healthy changes while appealing to young diners.

- Artistic presentations can make it more fun for kids to go beyond breaded chicken and fries. Try arranging items into a friendly face. Using ingredients typically found on your line can ease any extra efforts in the back of the house.
- Serve cucumber and zucchini slices for an edible game of tic-tac-toe while kids wait for the rest of their meal.
- Give children's dishes fun names on the menu, like "Celery Swords" or "Broccoli Bouquets," to encourage them to eat their vegetables.
- Offer a palette of colorful fruits and vegetables that kids can use to decorate their own plates, since taking part in "making" food may encourage them to eat it.¹³



DID YOU KNOW?

Some Japanese parents create elaborate "Bento box" lunches for their kids using everyday ingredients. Try making your own by cutting fruits and vegetables into stars, flowers, or animal shapes.

Medium Caffé Mocha

Chocolate
Shavings
20 kcals

360 ml Steamed
Whole Milk
225 kcals

30 ml Mocha
Sauce
100 Kcals

60 ml Whipped
Cream
45 kcals

3 Shots
Espresso
10 kcals

400 kcals
20%
of Daily
Energy

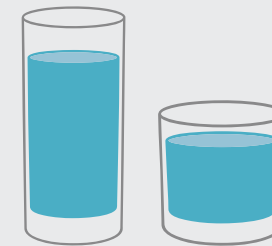
A Lighter Option

Extra fats and sweeteners have become commonplace in today's coffee drinks, but there are some simple ways to dial back the calories.

- **Hold the toppings.** Make a habit of serving coffee drinks without the extra sugar, saving whipped cream, chocolate syrup, and caramel sauce for desserts.
- **Use non-fat or low-fat milk.** Switching from full-fat or 2% milk can reduce both fat and calories.
- **Dust with flavor.** A shaker of cinnamon or cocoa powder lets guests adjust the taste of their drinks without overloading on calories.
- **Offer smaller sizes.** A 3-ounce serving of espresso or an 8-ounce serving of coffee can be exquisitely satisfying when you use quality ingredients and beautiful cups.



A Tall Drink of Water



The shape of the glass can influence people's perceptions of how much liquid is being served. Tall, thin glasses are perceived to contain more than short, wide glasses. Recent research also shows that people tend to over-pour into short, wide glasses. Set a standard to keep beverage servings constant, no matter what type of glassware you use.¹⁴

Pouring It On: Expanding Soda Sizes¹⁵

When soda was first introduced, it was sold in glass bottles that measured just 190 ml apiece. Manufacturers moved to cans in the 1960s, increasing the volume to 355 ml per serving. In the 1990s, 590 ml plastic bottles became popular, and consumers can now buy soda in bottles up to 1240 ml.



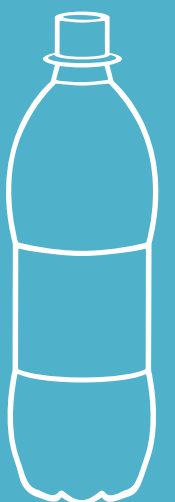
1950



1960



1990



Today

Big Experience

Small Portion

Sometimes what makes a dessert special doesn't add a single calorie. It might be a unique serving vessel, like a Mason jar or a spoon. Perhaps it's a surprising combination of colors, a juxtaposition of flavours (sweet with salty, sour, or bitter), a crispy crunch paired with a smooth, creamy filling, or even the contrast of hot and cold foods together that seems to capture the smoke from a campfire.

With a little inspiration, the creative chef can transform a few, high-quality ingredients into an experience to remember.



DID YOU KNOW?

The Café Gourmand, typical in France, combines three bite-sized desserts with a cup of coffee. It satisfies the diner with a sweet finish, while letting them experience three different (petite) dessert adventures.

Redesigning Desserts

While many people see dining out as a treat, 38 percent said they skip dessert in order to eat more healthfully.¹⁶ However, there are many ways to make dessert a permissible indulgence at the end of a meal.

- Replace heavy, cream-based desserts with yogurt-based desserts.
- Serve fruit between layers of mousse, creams, or cake.
- Provide poached fruit options.
- Instead of dusting with powdered sugar, use cocoa or spices, like cinnamon.
- Replace rich, creamy sauces with shaved dark chocolate or fruit coulis.
- Serve aerated desserts.
- Garnish with edible flowers, herbs, spices (cinnamon stick, star anise) or fresh fruit.
- Offer miniature versions of desserts like cakes, tarts, or custards.



DID YOU KNOW?

Miniature desserts have been making a big impression since the 18th century, when the French introduced petits fours.

Sources

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- 6 US National Library of Medicine, 2016
- 7 McClain, van den Bos, Matheson, Desai, McClure and Robinson, 2013.
- 8 Ordabayeva & Chandon, 2013
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- 10 Forde et al 2013
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- 13 van der Horst, Ferrage, Rytz, 2014
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