

Food Service Professional's Guide To

BALANCED MENUS

A collaborative, hands-on action plan for enhancing nutrition at your institution.

Learn how small, evidence-based menu changes have the power to positively impact the health of your customers.

Partner with
Balanced for
FREE one-on-one
support and get
started today!

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WELCOME

Thank you for your commitment to improving the lives of the people you serve. Like you, we understand the intimate connection between food and health, and we recognize that food environments heavily influence customers' dietary choices. In an era of widespread diet-related disease, we believe that everyone deserves access to healthy food, no matter the circumstance. Moreover, we believe that the healthiest choices should be easy and convenient to make, which is only possible in a food environment that values, encourages, and supports a more balanced way of eating.

At Balanced, we understand the challenges of today's modern food system, and like you, we're determined to overcome them for the sake of improving public health. In providing food for large numbers of people every day, you and your team have an incredible opportunity to prevent and reverse the leading causes of disease, disability, and premature death in the United States. We know this is not an opportunity or responsibility you take lightly. This is why we're so grateful to collaborate with visionary leaders like you as we work together to *change menus and save lives*.

ABOUT US

Balanced is a public health and nutrition advocacy organization focused on improving the healthfulness of institutional menus by providing food service professionals with the tools, resources, and supports they need to balance their menus. We believe community institutions are a key lever in the fight against chronic, preventable diet-related diseases and it's Balanced's goal to help prevent and reverse them in children, families, and communities.

Audrey Lawson-Sanchez

Audrey Lawson-Sanchez is the founder and executive director of Balanced. A decade-long educator, Audrey was inspired by the birth of her daughter to start Balanced and advocate for the healthiest possible future for all families. She is passionate about and committed to combatting our country's leading cause of disability, disease, and premature death: unbalanced nutrition. Audrey is proud to call Kansas City her home, where she lives with her husband and daughter. You can reach her at audreys@balanced.org.

Madeline Bennett

As the Manager of Institutional Outreach and Support, Madeline Bennett will be your primary point of contact at Balanced. Her role is to provide strategic support, practical insights, and to problem-solve for partner institutions. Previously, Madeline researched retail food environments for the nutrition policy department at Center for Science in the Public Interest in Washington, D.C. As an intern with Selamta Family Project, she conducted household food insecurity assessments and advocated for higher nutritional standards in Addis Ababa, Ethiopia. She studied nutrition, food policy, and economics in her undergraduate and graduate education. You can reach her at madelineb@balanced.org.



Partnership Goals & Roles

The goal of this collaboration, on the part of Balanced, is to help you *profitably, marketably, and successfully* design your institution's food environments to further emphasize **health-promoting foods** and beverages, while minimizing amounts of health-harming foods.





We want to make this transition as smooth and streamlined as possible for you and your team.

In practice, this means we will work with your institution to:

- Analyze the baseline healthfulness of your menus
- Assess and address your needs and constraints (e.g., food procurement issues)
- Develop a plan of action and set goals
- Provide educational materials, resources, and practical tips
- Provide plant-forward menu development tools and recipe ideas
- Help you successfully market incremental menu changes
- Assist in handling concerns from various stakeholders
- Track and evaluate progress across various metrics (e.g., student satisfaction with meals)
- Provide ongoing support and open communication after successful implementation of changes
- Connect you with a network of professionals who have completed this process successfully




Your institution's roles are to execute the plan of action and provide feedback and any data required to track and evaluate progress.


Open, honest communication will be key to the success of the collaboration.

The more information you provide, the more specific and tailored our support and resources can be.

If at any point, you become uncomfortable with the direction of the changes or with the nature of our partnership, we can always re-evaluate the strategy, pause, or halt progress. There are no financial commitments or contracts. Ultimately, our success is measured by how successful you and your team are, so we have every incentive to support you in a good-faith partnership.



The role of Balanced in this partnership is to provide directly, or connect your team with, the non-monetary resources it needs to successfully balance menus. This support can take several forms at varying degrees of involvement, including general consulting, connecting your kitchen staff with trainings, providing recipes and educational resources, working around procurement barriers, and spearheading marketing strategies—just to name a few.



Madeline Bennett is responsible for ensuring that you receive the resources you need, and you can reach out to her at any time with questions, concerns, or feedback at madelineb@balanced.org. Whether you need to speak with her on the phone or you require her assistance in-person, she will make herself available to you.



WHY BALANCE YOUR MENUS?

First, a note on terms. What do we mean when we say “balanced” menus, meals, and food environments? Ideally, a balanced menu, meal, or given food environment centers around minimally processed, mostly plant-source foods, lower overall in saturated fats, cholesterol, and sodium, and rich in fiber.

COMPONENT	BALANCED RANGE
SATURATED FAT	<7% OF CALORIES
CHOLESTEROL	<50 MG/DAY
SODIUM	<1500 MG/DAY
FIBER	>30 G/DAY



PUBLIC HEALTH IN CRISIS

According to the Centers for Disease Control, 60% of American adults, or about 117 million people, suffer at least one diet-related disease, and 40% suffer two or more. These diseases are largely preventable—some even reversible—and include cardiovascular disease, cancers, and diabetes, among others. These diseases are our nation's deadliest killers, individually and collectively. As a common denominator, **poor diet is the leading cause of illness, disability, and premature death.**

The toll is sobering: **nearly 700,000 Americans die every year** from diet-related disease.

These maladies, on paper, often seem too distant and abstract to apply to us. And yet, the average American's lifetime risk for developing cancer is more than one in three—not much better than a coin toss. The lifetime risk of dying from cancer is an alarming one in five. Chemotherapy, often the first treatment cancer patients receive, is not only excruciating to endure for many, but, sadly, contributes a mere 2% to all cancer survival in the United States. It is not nearly as effective at saving lives as preventive dietary measures, which have the added benefit of greatly reducing the need for such a grueling treatment to begin with.

Longevity in the United States has been on the decline for the last three years. While the opioid crisis explains much of the decline, the fall in women's life expectancy is largely due to women dying at younger ages from the usual diet-related diseases, particularly heart disease. In fact, for both men and women, the death rates have gone up from multiple diet-related illnesses, including diabetes, stroke, and Alzheimer's. Heart disease remains our number one killer, and advances in modern medicine are no longer improving the survival rate from it. It's time to get serious about this crisis and uproot one of its fundamental causes—poor diets encouraged by industries that promote unhealthy, addictive food environments.

THE DECLINING HEALTH OF TODAY'S YOUTH

A SERIOUS PUBLIC HEALTH CRISIS
REQUIRES MEANINGFUL ACTION,
AND IT IS UNDENIABLE THAT
CHILDREN'S HEALTH IN THE UNITED
STATES HAS BEEN IN DECLINE FOR
A NUMBER OF DECADES.

30%

Between 2000 and 2009, the prevalence of type 2 diabetes in children ages ten to 19 increased by over 30%. Diabetes is a leading cause of death in the United States.

Childhood obesity, which quadruples the risk of type 2 diabetes before age 25, is still on the rise in 2018. The largest increases in obesity prevalence were seen among two- to five-year-olds.



35%

Thirty-five percent of children ages two to 19 are overweight while about 20% are obese.

Twenty percent of teens have abnormal blood cholesterol, a risk factor for heart attack and stroke.



Among young people with no cardiovascular risk factors, 25% already have atherosclerotic lesions in their coronary arteries.



SHORTER, LESS HEALTHY LIVES

Public health experts predict today's generation of youth will experience worse health and shorter lifespans than their parents did.



Children in 1995 were already consuming **five times as much fast food** as children in 1977, and today, the clustering of fast-food establishments around schools has been linked with lower diet quality and a greater odds of overweight and obesity among students.

Given the shifts we've seen in the food system, it's no surprise that many lunch items now resemble typical fast-food fare, such as hamburgers, pizza, wings, and hot dogs.

This crisis means each of us has a responsibility to do what we can to improve the health of the children who depend on the institutions we manage and influence.

School food service teams have already done **an amazing job** adhering to the USDA mandates, but there's more work to be done—and a situation this urgent requires that food service teams treat and address children's health as the crisis it is.

Boldly balancing menus and school food environments is the most effective response your team can take.



HOW DID WE GET HERE?

Saturated Fat, Cholesterol, and a Lack of Fiber: **A trio of disease-promotion**

Given that a significant and increasing proportion of children today have high blood cholesterol, elevated body mass indices, and diabetes or prediabetes, it is not only reasonable but essential to combat deteriorating health trends at a collective, institutional level. The severity and pervasiveness of this deterioration indicate that actions taken at the individual level, while helpful, are completely inadequate as a public health strategy. Further, individual attempts to improve health are unlikely to be sustainable in food environments unsupportive of, or even hostile to, healthy dietary choices.

At the institutional level, focusing menu reforms particularly on three dietary components—saturated fat, cholesterol, and fiber—can dramatically reshape food environments, as the relative balance among these components reflects the relative balance between disease-promoting and health-promoting foods. As we will explore below, meals higher in saturated fat and cholesterol, in confluence with a dearth of dietary fiber, are linked with deteriorating health trends among children and adolescents.

While the USDA Dietary Guidelines for Americans provide recommended limits on saturated fat, trans fat, and cholesterol intakes, the Institute of Medicine (IOM) has not set recommended limits for these dietary components because LDL cholesterol concentrations invariably increase at any level of consumption above 0% of energy. As the entity responsible for determining national nutrition standards, the IOM recommends that intakes of these components be kept as low as possible while still maintaining nutritional adequacy. But what passes for “nutritional adequacy” is often subjective, allowing for globally health-harming meals and foods to slip under the radar.

In order to be objective and clear, we advise that saturated fat and cholesterol be as low as possible, with average upper limits of 6% of calories for saturated fat intake and 50 mg per day for cholesterol intake from school breakfast and lunch. In addition, we advise an average daily fiber intake of 22 grams from school breakfast and lunch.

SATURATED FAT

There is a robust causal link between saturated fat intake and elevated LDL cholesterol levels, a well-established marker for risk of heart disease and cardiovascular events. The Dietary Guidelines for Americans Committee advises that saturated fat intake be less than 10% of daily calories and preferably less than 7%, but that further reductions confer additional health benefits.



In a 14-year follow-up to the Nurses' Health Study, findings revealed that reducing total energy intake from saturated fats by five percentage points could lower risk of developing coronary heart disease by 42%. That such a relatively modest drop in saturated fat intake can substantially lower heart disease risk speaks to the potency of saturated fat's toxic effects on the body. Both saturated and trans fats—found most commonly in animal-source and processed foods—damage the lining of blood vessels, and consuming either in significant quantities creates unhealthful blood lipid profiles

Reducing total energy intake from saturated fats by five percentage points could lower risk of developing coronary heart disease by 42%.

In addition to increasing risk for cardiovascular diseases, higher saturated fat intake is a significant risk factor for systemic inflammation, insulin resistance, and obesity. Moreover, biochemical pathways involving saturated and trans fats implicate both in the progression of chronic inflammatory diseases, including autoimmunity, allergies, cancers, hypertension, atherosclerosis, enlarged heart, and neurodegenerative diseases. Higher saturated fat diets also produce unhealthful changes to the gut microflora make-up, which were associated with elevated endotoxin levels, fat mass, weight gain, liver fat content, insulin resistance, and risk of diabetes

CHOLESTEROL

Per the USDA DGAs and American Heart Association, individuals should limit cholesterol intake to 300 mg per day, and individuals at risk of cardiovascular diseases (CVDs) should limit cholesterol intake to 200 mg per day. These are not recommended intakes, but rather thresholds beyond which acute risk of chronic disease can be expected.

***Our bodies naturally
produce all the cholesterol
we need to be healthy,
and dietary sources are
nutritionally unnecessary.***



Furthermore, the oxidation of dietary cholesterol, through cooking or metabolic processes once ingested, poses significant potential health risks. Cholesterol oxidation products (COPs) are likely involved in both initiation and progression of chronic diseases, including atherosclerosis, neurodegenerative disease, kidney failure, and diabetes.

Cholesterol intake, an indicator of animal product consumption generally, has also been associated with greater risk of numerous cancers, including stomach, pancreas, colon, rectum, kidney, bladder, breast, and lung cancers and non-Hodgkin's lymphoma.

Given that one in five teenagers today has abnormal blood lipid profiles, and given that half of 2- to 15-year-olds already have fatty streaks in their arteries, it makes sense to restrict dietary cholesterol more stringently in school meals across the board as both a precaution and an intervention.

LACK OF FIBER

In a meta-analysis evaluating the relationship between dietary fiber and health, researchers found that individuals consuming the most fiber were significantly less likely to die from cardiovascular diseases, cancers, and all causes of death combined. The higher the fiber intake, the greater the benefits, particularly for cardiovascular health. These findings are unsurprising given that dietary fiber is linked to improvements in blood cholesterol levels, immune function, and blood sugar and insulin sensitivity and has a general anti-inflammatory effect on the body. Higher fiber intakes are also inversely associated with weight gain, obesity, and constipation.

***Underconsumption
of fiber may
constitute the most
widespread nutrient
deficiency in the
United States.***

Regrettably, less than 3% of Americans meet and exceed the minimum adequate intake of fiber per day, which may constitute the most widespread nutrient deficiency in the United States. The average American only consumes half of the minimum required fiber, a fact which contributes to our pandemic of poor health.

This profound lack of dietary fiber—as a constituent of phytonutrient-rich, whole plant foods but not highly refined foods or animal products—is a clear indicator of the gross imbalance between health-promoting and health-harming foods in our diets.





IMPORTANT NOTES ON SODIUM, TMAO, AND PROCESSED MEATS

Sodium

There is a vast amount of research linking dietary sodium to cardiovascular diseases like high blood pressure and to increased risk of stroke, heart attack, and other cardiovascular events. Consumption of high-sodium meals results in oxidative damage throughout the circulatory system, in the stiffening and constriction of blood vessels, and in impaired blood flow—all of which characterize the initial development of atherosclerosis. In interventional studies, dietary salt reduction improves blood vessel dilation and blood pressure in subjects with and without hypertension.

Research suggests that “modest and long-term reduction in population salt intake” could cut stroke deaths immediately by about 14% and cardiovascular deaths by about 9% in those with hypertension; in those without hypertension, stroke and cardiovascular deaths could decrease by approximately 6% and 4%, respectively.

The average sodium intake in industrialized countries—between 2800 and 4000 mg per day—far exceeds the AHA limit of 1500 mg. Researchers have implicated our high-salt diets in a number of autoimmune and inflammatory conditions, including asthma, multiple sclerosis, type 1 diabetes, and rheumatoid arthritis, among many others. Similar to the interventions described above, low-sodium diets maintained over a period of just a few weeks have been shown to improve lung function in asthmatics, whereas high-sodium diets were shown to worsen asthma symptoms. Further, researchers have mapped out pathways in the body through which high sodium intakes cause inflammation and foster conditions favorable to the development of autoimmunity.

In the American diet, the **largest sources of sodium come from processed and prepared foods containing meat and cheese, as well as from breads and processed meats in general.** As such, more than 70% of the sodium we consume is “hidden” within these products and beyond our control. Therefore, avoiding processed and restaurant-style foods that contain hidden sodium and replacing them with salt-conscious, scratch-made foods are the best ways to lower the sodium burden in food service.

TMAO

The regular consumption of animal-source proteins within a diet that lacks sufficient fiber—in other words, the Standard American Diet (SAD)—promotes the growth of gut bacteria that are capable of metabolizing specific dietary components found largely in animal products. Simultaneously, SAD discourages the growth of gut bacteria that preferentially digest plant matter. As a result, people who regularly consume animal proteins and those whose diets are low in animal proteins have marked differences in gut bacteria composition.

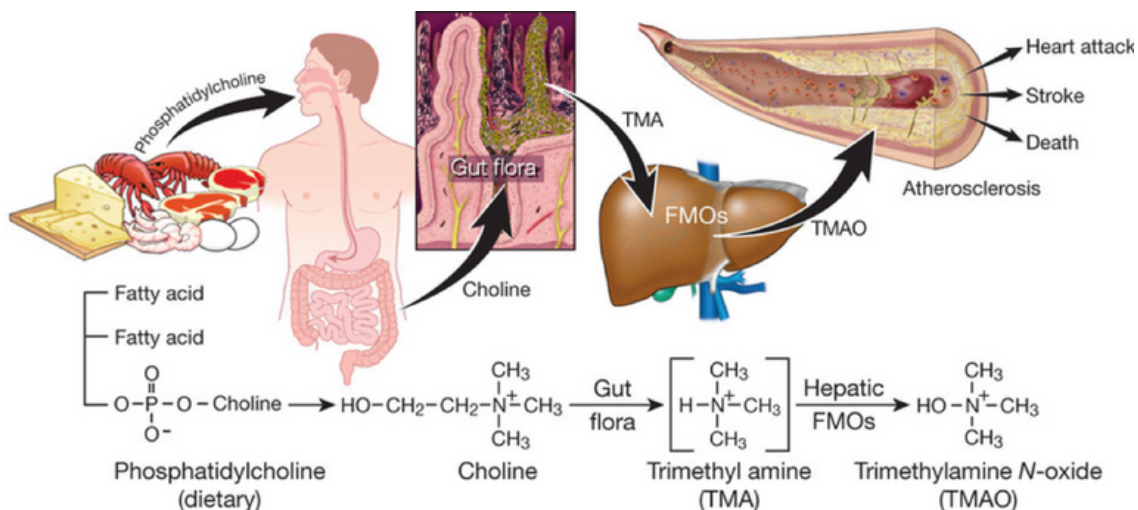


Image source: Wang et al. (2011)

Emerging research reveals how SAD contributes to the development of vascular diseases through this manipulation of gut bacteria composition. People who consume SAD metabolize the nutrients choline, lecithin, and carnitine differently from those consuming a fiber-rich, balanced diet. Specifically, the gut bacteria in those eating SAD convert these nutrients into a substance called TMA, which is later oxidized in the liver to TMAO. Through its toxic and inflammatory effects on the body, TMAO directly contributes to the formation of atherosclerotic plaques. In fact, TMAO levels in the body are associated with an increased risk of having a major cardiovascular event, such as heart attack.

Further complicating these metabolic changes is the fact that animal proteins—meats, seafood, dairy, and eggs—tend to be rich in choline, lecithin, and carnitine relative to plant-source foods. Not only do consumers of SAD have higher levels of disease-promoting bacteria in their guts, but they also consume more of the specific nutrients these bacteria metabolize into toxic TMA. We can only stop this vicious circle when the balance in our diet shifts toward fiber-rich plant proteins like 100% whole grains, legumes, nuts, and vegetables. Such a shift promotes the growth of beneficial fiber-fermenting bacteria and reduces the overall dietary burden of choline, lecithin, and carnitine.

PROCESSED MEATS

Across dozens of studies, the preponderance of evidence strongly suggests that consuming processed meats contributes to heart disease and increases the risk for a long litany of chronic illnesses, including type 2 diabetes and cancers of the throat, esophagus, stomach, colon, rectum, lung, pancreas, breast, prostate, and bladder, among others. Researchers conclude that processed meats—those cured, smoked, and treated with nitrates or other preservatives—constitute a “powerful multi-organ carcinogen” and that “clinical and public health guidance should especially prioritize reducing processed meat consumption.”

Among the many public health authorities that have called on institutions and individuals to eliminate and avoid processed meats are the American Medical Association (AMA), the American Academy of Pediatrics (AAP), the World Health Organization (WHO), the World Cancer Research Fund, and the Harvard School of Public Health.



The AMA passed a resolution urging hospitals to begin “(a) providing a variety of healthy food, including plant-based meals, and meals that are low in fat, sodium, and added sugars; (b) eliminating processed meats from menus; and (c) providing and promoting healthy beverages” for the benefit of their patients, visitors, and employees. Similarly, AAP released a statement advising that children not eat processed meats because the nitrate and nitrite additives “interfere with thyroid hormone production and the blood's ability to deliver oxygen in the body.” The AAP also noted that “children are more sensitive to chemical exposures because they eat and drink more, relative to body weight, than adults do, and are still growing and developing” and that the endocrine-disrupting effects of these and other additives have potential lifelong consequences to children’s health.



CASE STUDY

SCHOOL MEAL NUTRIENT ANALYSIS

The following data were taken from real menus in January 2019 from a randomly selected high school in a randomly selected district among the 25 largest in the United States.

All breakfast and lunch options were selected to make reimbursable meals per federal mandates.

ORIGINAL MENU

Table 1. Nutrient content for one week of complete, reimbursable breakfast and lunch meals

	Meal	Calories	Total Fat (g)	Sat. Fat (g)	Cholesterol (mg)	Sodium (mg)	Fiber (g)
Monday	<i>Breakfast</i>	425	11.0	6.5	28	644	3
	<i>Lunch</i>	899	30.0	15.5	80	1304	11
Tuesday	<i>Breakfast</i>	550	21.5	7.5	16	971	3
	<i>Lunch</i>	996	49.2	14.5	141	1581	5
Wednesday	<i>Breakfast</i>	262	6.0	1.4	45	430	2
	<i>Lunch</i>	830	12.5	5	25	1477	14
Thursday	<i>Breakfast</i>	393	5.0	1.5	10	231	5
	<i>Lunch</i>	621	16.5	4.3	60	748	7
Friday	<i>Breakfast</i>	451	16.5	5.5	231	789	3
	<i>Lunch</i>	694	24.9	5.5	40	1217	11
Daily Combined Average	<i>Breakfast + Lunch</i>	1224	38.6	12.6	164	1878	13

Although school breakfast and lunch combined met just **60% of high-schoolers' calorie needs**, school meals provided **just 40% of fiber needs**, on average, and provided **more than 80% of their daily sodium maximum intakes** based on even the most lax standards. Saturated fat contributed approximately 10% of total calories, 3 percentage points above the American Heart Association's (AHA) recommendation of less than 7% of total calories. Total fat intake contributed approximately 30% of calorie intake, a relatively high figure; **average cholesterol intake was more than 80% of the AHA recommended maximum of 200 mg per day.**

NUTRITIONALLY ENHANCED MENU

After replacing the least healthy lunch entrée in the week with a plant-forward alternative, the daily averages of total fat, saturated fat, cholesterol, sodium, and fiber changed favorably for the entire week.

Table 2. New daily average and percent change after replacement with plant-based lunch swap

	Meal	Calories	Total Fat (g)	Sat. Fat (g)	Cholesterol (mg)	Sodium (mg)	Fiber (g)
Tuesday	<i>Lunch with Swap</i>	902	21.1	5.2	14	631	29.1
New Daily Average	<i>Breakfast + Lunch</i>	1205.4	33.0	10.7	138.2	1688.4	17.6
% Change	<i>Breakfast + Lunch</i>	-1.5%	-14.5%	-14.8%	-15.5%	-10.1%	37.7%

Note: The percent change is between the daily average before versus after the plant-based lunch swap.

This simple substitution led to a **15% reduction in total fat, saturated fat, and cholesterol average daily intakes**; a **10% reduction in average daily sodium intakes**; and a **38% increase in average daily fiber intakes**.



In a similar nutrient analysis using a different high school's breakfast and lunch menus, we replaced two conventional lunch entrées in one week with plant protein-based alternatives, which yielded the following changes in average daily nutrient intakes:



16%

reduction in total fat

18%

reduction in sodium

30%

reduction in saturated fat

30%

reduction in cholesterol

75%

75% increase in
dietary fiber



This example is further proof that meaningful change won't come in the form of adding a side salad to the lunch line, as it exposes the flaw in the false notion that we can meaningfully balance unhealthy entrée items with a small side of vegetables that may or may not even be consumed.

When health-promoting proteins and produce are not incorporated into the main entrée itself, our healthiest foods are too frequently destined for the trash or left off the tray entirely. **But even when the side of vegetables or fruit is eaten, the saturated fat, cholesterol, and sodium in a conventional entrée will overwhelmingly negate the health benefits plant foods confer.**

That is why our definition of "balance" requires (1) that there be alternative plant-rich entrées to replace the most harmful conventional proteins on a given menu and (2) that every potential opportunity to make conventional items healthier be taken.



HIGH-IMPACT OUTCOMES

COST SAVINGS,
STUDENT SATISFACTION,
AND ACADEMIC SUCCESS



COST

In a pilot study conducted in concert with Friends of the Earth, Oakland Unified School District saved \$42,000 dollars in one year after reducing its meat purchases by 30%. On the whole, students consumed 10% more legumes, fruits, and vegetables, and most surprisingly, student satisfaction with meals increased. A number of Florida school districts have found similar success with an average savings of ten to 20 cents per meatless meal.

So the question for most isn't how much these changes cost, but really **how much money is your district losing by not shifting to more balanced, plant-rich menus?**



ACHIEVEMENT

According to a Brookings Institution study, schools with healthier menus tended to have more academically successful students. Moreover, schools whose menu healthfulness improved over time saw a concurrent improvement in overall academic performance. This gain was most pronounced among students who depend more heavily on school breakfast and lunch programs and who experience food insecurity outside of school.

Per the USDA's own nationally representative study, schools with the healthiest meals did not spend more money per meal than did schools with the least healthy meals. Moreover, schools offering the healthiest meals also enjoyed the highest participation rates. The study further noted that plate waste was comparable pre- and post-implementation of the guidelines. These findings indicate that (1) higher nutrition standards are not cost-prohibitive, (2) more healthful eating is not what deters children from finishing their meals, and (3) engagement is highest when meals are more nutritious.



HIGH-IMPACT OUTCOMES

COST SAVINGS,
CUSTOMER SATISFACTION,
AND IMPROVED HEALTH



According to an analysis from the Johns Hopkins Center for a Livable Future, four hospitals in the San Francisco Bay Area collectively saved over \$400,000 after reducing meat purchases by 28%.

Over half of these savings came from Santa Rosa Memorial Hospital, which made the deepest cuts to meat and poultry purchases as well as to dairy. In total, this hospital reduced beef purchases by 60%, pork purchases by 50%, poultry purchases by 80%, and lunch meat by 77%.

Anecdotal evidence from the managers at all four participating hospitals reported enthusiastic support for the menu changes from employees and patients alike, driven frequently by an increase in the availability of meatless and plant-based options.



What's more, it reported a 30% increase in vegetables served on patient menus as well as a 24% increase in patient meal satisfaction ratings.



HIGH-IMPACT OUTCOMES

COST SAVINGS,
EMPLOYEE SATISFACTION,
AND IMPROVED PRODUCTIVITY

COST

Four of the ten most expensive health conditions for U.S. employers are related to heart disease, diabetes, and stroke, all of which are diet-related diseases. Combined, the lost productivity cost of these four conditions amounts to \$525 billion annually, and employees with diet-related diseases also file twice as many workers compensation claims.



ABSENTEEISM

Absenteeism, intimately bound up with poor employee health, costs American employers a total of \$225.6 billion per year. In fact, unhealthy employees miss an average of 27% more work than do healthy ones, and nearly two-thirds of employers say employees' health habits are a top challenge to controlling health care costs.

RESEARCH

Emerging research is demonstrating how a plant-rich shift in diet can enhance cognition, mood, and productivity while reducing absenteeism and boosting physical health. In a study on obese and overweight adults, one year on a low-fat, high-carbohydrate diet (i.e., a diet rich in plants) significantly improved feelings of depression, anxiety, anger, fatigue, vigor, confusion, and general mood in comparison to one year on a low-carbohydrate, protein-rich diet (i.e., a diet rich in animal products).

In a study conducted in a corporate office setting, overweight and obese employees receiving nutrition education on whole, plant-based eating reported significant improvements in overall health, physical functioning, mental health, vitality, and satisfaction with diet after 22 weeks in comparison to a control group receiving no instruction. Impressively, employees receiving instruction reported a 40-46% decrease in health-related productivity impairments during work hours. This group also lost an average of nine pounds per person, and the more classes an employee attended, the more weight she or he tended to lose. What's more, they even reported a significant decrease in spending on food. With these benefits in mind, it's easy to see how this low-cost intervention could pay for itself many times over in stimulated productivity and wellbeing.

Expanding upon the previous study, researchers conducted an intervention study involving nutrition education and the addition of low-fat plant-based meal options in worksite cafeterias over a period of 18 weeks. Compared to the control groups, which received no instruction and no access to plant-based meals in their worksite cafeterias, the groups receiving the intervention noted significant improvements in:

- All impairments due to health
- Overall work impairments due to health
- Non-work-related activity impairments due to health
- Depression
- Anxiety
- Fatigue
- Emotional well-being
- Daily functioning due to physical health
- General health



From these data, it's clear that investing in the physical health of your employees in making cost-effective, innovative changes to worksite food environments can lead to better productivity, better quality of work, lower expenses in the long run, and a more convivial atmosphere given what we know about the intimate links between diet, physical health, mental health, and the associated costs to businesses of managing chronically ill employees.



Setting Goals for Balanced Menus

To ensure your efforts have the biggest impact, it's important to articulate the overall mission and principles that will guide your goal-setting.

By engaging with these tools it's clear you have a deep commitment to balancing your institution's menus. You know how urgent it is to combat the rising rates of overweight, obesity, and chronic disease among children and adolescents within your community. You are a leader in the fight to address the decline in children's health for what it is—a serious national public health emergency.

The following pages are intended to serve as a guide for your goal-setting process. These resources are intended to be used similarly to a workbook or journal, which is to say written on, used to capture brainstorming ideas, to take notes, etc.





MEAL OFFERING

GOALS WORKSHEET

Overall Goal

Example: Increase nutrient density by replacing processed meats and a portion of conventional animal protein-based entrées with plant protein-based alternatives.

RECOMMENDED GOAL BREAKDOWN

Replace ____% of conventional entrées with plant-rich alternatives within ____ months. (recommended 15-20%, 12 months)

Eliminate processed meats (smoked, cured, and/or contain nitrates) within ____ months. (recommended 6 months)

Offer 100% whole grains on a daily basis at breakfast and lunch within ____ months.

Offer a plant protein-based entrée ____ times each week in the form of warm, substantive, varied meals within ____ months. (recommended 2-3, 6 months)

Offer plant-derived milks alongside cow's milks, and restrict cow's milk varieties to lowest-fat, unflavored varieties within _____ months.



NUTRIENTS

GOALS WORKSHEET

Overall Goal

Example: Decrease weekly intake of saturated fat, cholesterol, sodium, and added and refined sugars.

Increase weekly intake of fiber, plant-based proteins—especially legumes, fruits, vegetables, and 100% whole grains.

RECOMMENDED GOAL BREAKDOWN

Reduce meal saturated fat content by _____% based on daily averages. (recommended 15-20%)

Reduce meal cholesterol content by _____% based on daily averages. (recommended 25-30%)

Reduce meal sodium content by _____% based on daily averages. (recommended 15%)

Reduce refined sugar content by _____% based on daily averages. (recommended 10%)

Increase overall weekly fiber content in entrees by _____g each week. (recommended 6-12 grams)

Short-term: Increase meal fiber content by _____% based on daily averages. (recommended 50%)

Long-term: Offer as many plant-protein meals as animal-protein meals by year _____. (e.g., 2024-2025)



OPERATIONAL

GOALS WORKSHEET

Overall Goal

Example: Reduce or maintain operational expenses.

Improve meal satisfaction and preference.

RECOMMENDED GOAL BREAKDOWN

Save _____% per average meal. (recommended 1-3 %)

Save _____ cents per plant-based meal. (recommended 10-15 cents)

Increase purchases of fruits and vegetables by _____%.
(recommended 5-15%)

Increase purchases of 100% whole grains by _____%.
(recommended 30%)

Increase purchases of legumes by _____%.
(recommended 20%)

Increase self-rated meal satisfaction scores using a
pre/post survey.



NOTES & IDEAS

REMEMBER FOR LATER

IMPORTANT NOTES

RECIPE IDEAS

QUESTIONS

FOLLOW-UP

TAILORED ACTION PLAN AND TIMELINE

The action plan, which entails the process of reaching your team's goals, will be tailored based on two main inputs (outlined below). These inputs will help us generate together a list of prospective menu changes, which will be categorized and prioritized based on (1) ease of implementation, (2) potential health impact, and (3) urgency. Based on this sorted list, we will create a feasible, tentative timeline, which will include scheduled due dates and action items. The action items are the concrete steps we will take together to reach the goals your team decides upon. Balanced will provide tailored, non-monetary resources where and when they are needed in order to successfully execute these action items.

Please remember that there is no contract to sign and no formal or legal obligations to follow through with all or part of the action plan, nor are there any expenses for the services Balanced provides. You can withdraw from the program at any time for any reason.

Analysis
Capacity Building
+ Planning
Promoting
+ Training
Implementation



Balanced will help you audit the following:

Barriers and obstacles

Knowledge	Skill	Mindset
<ul style="list-style-type: none"> Plant-forward recipe development Marketing savvy 	<ul style="list-style-type: none"> Kitchen staff training needs 	<ul style="list-style-type: none"> Customers' preferences and openness to change Concerns from other stakeholders (e.g., parents) Institution's internal politics
Access to resources: <ul style="list-style-type: none"> Financial constraints Logistical barriers Operational barriers 		

A comprehensive menu analysis

Component analysis	Meal analysis	Nutrient analysis (optional, or where feasible)
<ul style="list-style-type: none"> Percentage of animal vs. plant proteins Red and processed meat frequency Vegetable diversity Grains (% whole) Dairy options and alternatives Fresh fruit Prevalence of refined items MyPlate ratios 	<ul style="list-style-type: none"> Identify healthiest current menu options Identify easily modifiable menu options (single ingredient swaps) Identify the least healthy menu options Select and/or develop plant protein-based recipes for replacing least healthy options 	<ul style="list-style-type: none"> Based on nutrient content averages of complete meals Saturated fat (% of kcal) Total fat (% of kcal) Cholesterol Sodium Fiber



Planning & Capacity Building

At this stage, we will provide the tailored resources your institution needs to confidently and successfully execute each action item.

Menu design tools

- Recipe ideas and templates, example menus, protein and ingredient swaps

Menu promotion materials

- How-to guide and examples

Tailored promotional materials, created jointly

- Materials for staff buy-in
- Resources for communicating the upcoming changes and expectations

Menu Design Tools

Example Menus

The following menu provides an idea of what our vision of balance looks like in practice. Menus that are objectively healthfully balanced can be taken in many different directions, feature many diverse cuisines, and come in all levels of sophistication. Whether you want to keep it simple or impress your customer base with food cultures from around the globe, the variability of plant-rich menus is only as limited as your imagination and degree of financial flexibility.



Example 1: Menu for public institutions (meets USDA regulations for schools)

<p>WG veggie pizza w/ or w/o mozzarella</p> <p>Chicken (2 oz.), brown rice, & veggie soup with WG bread</p> <p>-Italian herbed white bean salad</p> <p>-Seasoned, roasted cauliflower</p> <p>-Fresh orange slices</p>	<p>Crispy teriyaki tofu with mixed veggie lo mein (WG)</p> <p>Black bean tamales w/ brown spanish rice and tomatillo salsa</p> <p>-Sauteed squash</p> <p>-Zesty sweet potato wedges</p> <p>-Fresh pineapple</p>	<p>Bean, okra & brown rice jambalaya w/ WG cornbread</p> <p>WG pasta salad with tomato, green onion, olives, spinach, & chickpeas</p> <p>-Garlicky green beans with lemon</p> <p>-Sauteed collard greens</p> <p>-Fresh grapes</p>	<p>Butternut squash and chickpea WG mac 'n "cheese" (nondairy)</p> <p>Beef (2 oz) and bean burger on WG bun w/ lettuce and tomato</p> <p>-Herbed roasted potato wedges</p> <p>-Steamed broccoli</p> <p>-Fresh banana</p>	<p>Lentil, eggplant, and potato moussaka w/ WG pita</p> <p>WG veggie and beef (2 oz.) lasagna w/ or w/o mozzarella</p> <p>-Greek tomato salad</p> <p>-Spinach and citrus salad</p> <p>-Fresh strawberries</p>
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Menu Design Tools



Example Menus

Example 2: Meatless menu with additional daily options

<p>Chana masala w/ brown rice or WG pita</p> <p>Mixed veggie & hummus WG wrap w/ or w/o mozzarella</p> <p>Soup: carrot ginger bisque</p>	<p>Bean chili with WG cornbread or brown rice</p> <p>Falafel gyro with tomato, onion, spinach, and cucumber w/ or w/o tzatziki</p> <p>Soup: minestrone</p>	<p>Spinach & basil pesto WG pasta w/ creamy herbed white beans</p> <p>Mixed veggie fajitas w/ refried beans on WG corn tortillas w/ or w/o cheese</p> <p>Soup: French onion</p>	<p>General Tso's tofu & mixed roasted veggies w/ brown rice</p> <p>Lentil, mushroom, and sweet potato shepherd's pie</p> <p>Soup: mushroom, miso, and nori</p>	<p>Sweet potato & lentil korma w/ brown rice or WG pita</p> <p>Refried pinto, spinach, and cheese enchiladas with brown spanish rice</p> <p>Soup: potato leek</p>
<p>Salad bar: whole grains, legumes, nuts, fresh & cooked vegetables, choice of vinaigrettes)</p>	<p>Pizza station: classic Margherita, veggie supreme, with cheeseless options</p>	<p>Smoothie station: your choice of fruit, greens, & milks or yogurts</p>	<p>Deli station: made-to-order wraps - choice of protein, greens, vegetables, spreads & dressings</p>	<p>Hummus bar: classic, roasted red pepper, avocado, edamame, w/ pita & fresh & roasted veggies</p>

Menu Design Tools

Example Menus

Example 3: Menu for private institutions (private schools, worksites, etc.)



Sweet potato gnocchi pasta salad with chickpeas, radish, mint, basil, tomato, cucumber, chives, and a lemon-olive oil vinaigrette; goat cheese optional

Dairy-free tikka (1.5 oz chicken) masala containing red lentils, broccoli, and sweet potato

Harissa roasted root vegetable medley with cannellini beans and bulgar

Sauteed mustard greens

Green pea hummus

WG couscous, brown rice, WG bread and pita

Salad bar with mixed greens, legumes, fresh veggies, and fresh fruit

Saag tofu "paneer" offered with dal makhani and vegetable biryani (WG)

Eggless chiles rellenos stuffed with pinto bean purée, braised kale, caramelized onions, and queso fresco, baked in a light mole sauce

Ajo blanco

Tomatillo salsa

Gujarati cabbage salad

Baked vegetable samosas and mint chutney

Brown Spanish rice, baked tortilla strips

Salad bar with mixed greens, legumes, fresh veggies, and fresh fruit

WG pasta alla Norma, containing marina, sun dried tomatoes, baked eggplant, and basil; ricotta salata optional

Boeuf bourguignon (1.5 oz) with pearl onions, lima beans, carrots, potatoes, parsnips, and fennel

Sicilian caponata

Potato & summer squash dauphinoise made with cashew cream

Arugula, avocado & grapefruit salad with toasted pine nuts and a balsamic reduction

Fresh WG baguette

Baked vegetable and brown rice arancini

Salad bar with mixed greens, legumes, fresh veggies, and fresh fruit

Bangan bartha with lemony steamed potatoes, peas and broccoli

Mung bean stew with acorn squash, garlic, spinach, and okra, in a subtle fish sauce broth

Beyond Burger on WG sesame buns, with choice of tomato, lettuce, red onion, caramelized onion, and avocado

WG roti, Steamed brown sticky rice

Mango, papaya, and banana salad

Baked russet and sweet potato fries

Coconut cardamom rice pudding

Salad bar with mixed greens, legumes, fresh veggies, and fresh fruit

Briam (mixed roasted vegetables in a tomato, basil, and oregano sauce) with gigante beans and WG pita

Braised mackerel (1 oz) tacos containing baked sweet potato, refried black beans, pickled onions, cilantro, avocado, and red cabbage on fresh corn tortillas

Fattoush salad with chickpeas

Fat-free tzatziki

Muhammara

Classic guacamole

WG pita, baked tortilla strips

Salad bar with mixed greens, legumes, fresh veggies, and fresh fruit

A woman with voluminous curly hair is looking down at something in her hands in a kitchen setting. The background shows a tiled wall and wooden shelves. A semi-transparent yellow box with text is overlaid on the lower half of the image.

MEAL IDEAS

Healthful plant-rich recipes follow a straightforward formula yet allow for endless possibilities in taste and texture. The most nutritionally well-rounded entrées contain 100% whole grains, legumes, vegetables (and/or fruits), and a source of unsaturated fats, such as nuts, seeds, and oils.

Animal products, where they are suitable in a recipe, can be used more sparingly as condiments or toppings.

On the following pages you'll find a few examples demonstrating the wide variety of plant-rich recipes for your menu inspiration.



Bean and Veggie Wraps

This meal format can take on varying flavor profiles. Use **falafel or hummus** and classic **gyro vegetables for a Mediterranean** spin. **Southwestern-style ingredients** are great from lunch and breakfast wraps and burritos. **Add baked tofu, vegetables, and savory soy and sesame flavors for an Eastern-inspired** version.

Pastas

Pasta is one of the most versatile ingredients to work with. With a simple sauce, such as **marinara or pesto**, and endless combinations of **vegetables, greens, beans, and nuts** to add, it's easy to serve pasta on a regular basis while still maintaining a sense of variety in flavor and texture.

Bowls

Pair whole grains, like **brown rice, legumes and fresh and cooked vegetables**, then dress with a vinaigrette or a creamy tahini-based dressing. Top with **toasted seeds or nuts** for texture and extra nutrition, or serve with a dollop of hummus. Take the flavor profile anywhere by **adding different regional spices and ingredients** that suit your customers' palates.



Mexican and Tex-mex

Most conventional Tex-mex or Mexican-inspired dishes in food service follow the combination of “beef + cheese + salsa + tortilla.” With so many plant-based swaps to choose from, it’s easy to **reformulate your current Tex-mex dishes with beans in place of beef and additional vegetables in place of cheese.** Try caramelized onions, roasted veggies, or even a drizzle of cashew cream. Add more herbs like cilantro and oregano and more spices like cumin and chili powder.

Casseroles

Casseroles are both convenient and filling, but they often contain red and processed meats—think shepherd’s pie, Greek moussaka, or sausage and egg breakfast casseroles. The meat in these dishes can easily be replaced with **lentils, beans, soy crumbles, additional servings of vegetables,** or other meat substitutes.

South Asian

Curries centered around legumes and vegetables are some of the most **savory and satisfying dishes,** and they’re also some of the **easiest and cheapest to prepare and adapt.** Chana (chickpea) masala, aloo gobi, and dal makhani are just a few of the delicious plant-rich South Asian dishes to choose from. Or try a plant-based saag paneer by replacing paneer cheese with slices of firm tofu. Serve up these dishes with **brown rice or a whole-grain flatbread.**



Breakfast

Hearty American breakfasts tend to center around some of the least healthy foods in our diets, namely refined grains, processed meats, and eggs. Adding plant-rich alternatives might seem impossible, but it's easier than you think. In place of scrambled eggs, try **scrambling tofu or chickpea flour batter**. Breakfast burritos are popular hot items that can be made with beans and veggies. Try refried **pinto beans, potatoes or sweet potatoes, onion, garlic, bell pepper, and salsa**. Serve up a quintessential English breakfast with hearty whole-grain toast and baked beans. Try smearing hummus or another bean spread on bagels instead of cream cheese, or use **nut-based spreads and top with fresh fruit**. Try overnight oats or baked oatmeal with fruit. Whole-grain baked goods, pancakes, and waffles can easily be prepared with healthier alternatives to eggs, butter, and cow's milk. These breakfast alternatives to the standard American breakfast are sure to please any time of day..

American

Burgers with fries, pizza, mac 'n cheese, meatloaf, ice cream, loaded baked potatoes, chicken sandwiches, sloppy joes, mashed potatoes and gravy, cole slaw. **Incredibly, all of these American favorites and more can be reformulated around plant-based proteins that are rich in nutrients, high in fiber, and low in saturated fat.** Clever usage of **legumes, whole grains, nuts, mushrooms**, vegetables, fruits, and seasonings can turn bland, heavy American fare into satisfying, filling, and health-promoting dishes that taste just as good, if not better, than the originals.

Entrée Salad

Similar to bowls, entrée salads can be mixtures of whole grains, legumes, and greens, but each of those components on its own makes a great base for salads. A **diverse combination of nuts, vegetables, fruits (fresh or dried), and vinaigrettes** create unique flavors that will keep a rotation of daily salads interesting and appealing. Or, in place of nuts, **add crunchy roasted chickpeas or a variety of seeds.**



Protein Swaps



Chickpeas, hummus, falafel
Other bean spreads
White beans (cannellini, navy, butter, etc.)
Tofu, tempeh, edamame
Seitan



Hummus and other bean spreads (cheese)
Plant-derived milks and creams, e.g. soy
Blended cashews or other nuts (cheese, cream)
Reduced fat coconut milk (milk, cream)
Tahini (cheese, cream)
Avocado (cheese)



Applesauce (baked goods)
Aquafaba (baked goods, meringues)
Banana (baked goods)
Chia seeds (baked goods)
Chickpea flour (scramble, quiche, baked goods)
Ground flaxseed (baked goods)
Pumpkin purée (baked goods)
Tofu (scramble, quiche)



Egg-free aioli
Hummus
Muhammara or romesco sauce
Baba ganoush
Tahini



Black beans
Chickpeas, falafel
Crumbled tofu or tempeh (seasoned, baked)
Jackfruit
Kidney beans
Lentils (all colors)
Seitan
Textured vegetable protein (TVP)



Promoting **Balanced Menus** & Training Your **Team**

Overhauling your entire menu overnight and not investing your team in changes is a recipe for disaster.

Unrealistic expectations set you and your team up for failure, but building consensus around the changes you're making removes the pressure to overhaul everything all at once, and getting staff buy-in makes the entire process easier.

To set you up for success at this stage, we will help you (1) build and execute a promotional plan, including gathering testimonials and allies within the constituency, (2) respond to constituency feedback, and (3) complete any necessary staff trainings.



There is no one right way to roll out menu changes, and there is not an exact or scientific timeline either. You and your team probably have a lot of experience marketing and promoting the menus you've created, so we've designed the tools and resources on the following pages in the hopes of helping you build on the successes you've already had.

Menu Change Considerations

1. Think about your messaging

MAKING A BIG DEAL OF CHANGE MIGHT NOT ALWAYS PAY OFF

Researchers at the London School of Economics found that by removing the labels "vegetarian", "vegan", or "meatless" from their menu items and integrating them into the regular menu, their sales increased by more than 55%.

Instead of talking about and/or labeling what your new dishes don't have, play up the exciting flavors and nutritional benefit of the dish.

Using words like **balanced, enriched, flavorful, energy-boosting, fiber-rich, nutrient-dense, and other positively-associated phrases** is a great way to start investing your team, customers, and other stakeholders in the menu changes from the very beginning. If you can help them see how the menu changes will improve some part of their life, you'll be on track to winning them over!



**MORE ON MARKETING MENUS
CHANGES IN NEXT SECTION**

Menu Change Considerations

2. Find an ally on your team

Change is always easier when you're not doing it alone. Chances are, someone on your team or in your community is on board with the very reasonable improvements you want to make to your menus. It likely won't be hard to find someone who agrees that improving the healthfulness of your menus is a good thing for everyone.

You probably already know who on your team you can count on to be excited about the changes. Tell them about your plans early and encourage them to share their excitement with the rest of the team. Building a positive consensus around menu changes will make the inevitable road-blocks easier to get around and when changes feel more like a team effort than a top-down mandate, they happen much more smoothly.

3. Gather Testimonials

Is one of your team members or customers really passionate about the changes you're making? Ask them to write up a few sentences why or to record a small video to share with others.

Interview a nutrition expert or food service professional whose opinion is credible and enthusiastic. Share the quotes as part of the lead-up to the new menus or early in the marketing campaign.

As the menu changes roll out, ask the people you serve to share a testimonial and post the quotes around your cafeteria or in a newsletter.

Build positive momentum around the changes by regularly updating the testimonials and make your customers feel important, heard, and celebrated.

"I can't wait for the new, healthier menu items!"



Quick tip

Below you'll find some sample language you can use to share the news and invest your staff in the menu changes you've committed to. No need to copy/paste everything verbatim (unless that's helpful!) but our goal is to set you up for success by sharing an example upon which you can build.

We're leading the healthy-food revolution!

Here at **[your location]** we've always prided ourselves on the quality of our food and the care we take to ensure our **[students, customers, colleagues]** are fed delicious, healthy food. Well, now we're taking it one step further by balancing our menus with even more health-promoting meal options.

We've been selected as one of the first in the country to take part in a program designed to boost the health of our **[customers, etc..]** by enhancing the healthfulness of our menus!

Over the course of the next few months, our team will swap one meal a week for a healthier alternative. Our focus will be on reducing the amount of cholesterol, saturated fat, and sodium on our menus while boosting the fiber, vitamins, and minerals—changes that are scientifically proven to fight against diet-related diseases like heart disease, hypertension, high cholesterol, obesity, stroke, and even some cancers.

Don't worry, we're not changing everything overnight! Our goal is to create sustainable, healthy menus that our customers love. Starting with just one meal each week is a great way to introduce new foods, and it will give us a chance to hear from our customers in real-time about what they do and don't like so we can better serve them in the future.

What this means for our team...**[share with your team the next steps or timeline for change]**

The opportunity to enhance the healthfulness of our menus is so exciting and our team should feel proud to be leading this work!

ANSWERING YOUR STAKEHOLDERS' QUESTIONS



Anytime you make menu changes, you'll probably be met with a few questions. Especially if you engage in a marketing and/or promotional campaign. Having a prepared response or some place your customers can go to learn more will help ease any anxiety those you serve may be experiencing.

Q Why are changes being made to food service?

A **(for schools)** We are diversifying our menus by adding more healthy entrée options in place of health-harming ones, as well as providing additional beverages and sides. We want to create an atmosphere that promotes the health, wellness, and academic success of our students in making healthier choices as easy, convenient, and appetizing as possible.

A **(for businesses)** We are diversifying our menus by adding more healthy entrée options in place of health-harming ones, as well as providing additional beverages and sides. We want to create an atmosphere that promotes the wellbeing of our employees / clients in making healthier choices as easy, convenient, and accessible as possible.

Q What changes are being made to the menus?

A We are adding a number of plant-based options to the menu and **reducing processed meats, red meats, and high-fat and -cholesterol foods that have been shown to harm health when eaten on a regular basis**. In addition, we are adding healthier milks, healthier grains, and more produce and plant proteins generally as a means of diversifying options and improving consumer choice.

Q Where can I read the evidence in support of these change?

A We have resources on our website, as well as handouts, that provide links to the primary sources we used to determine our new nutrition standards. **These resources will help explain the health benefits, academic and productivity benefits, and the cost savings associated with the innovative menu changes we have implemented.** Another resource, with which we are unaffiliated, is the Nutrition Facts website, www.nutritionfacts.org.

Q Why are you removing processed meats from the menu?

A The World Health Organization has determined processed meats to be Group 1 carcinogens, meaning that the body of evidence supporting a causal link between processed meats and cancer is definitive. Other medical authorities, including the American Medical Association and the American Academy of Pediatrics, have called for the elimination of processed meats from hospital menus and from the diets of children and pregnant women. **We want to ensure that nothing we serve is causing demonstrable harm.**



Q How will this affect the price of lunch and breakfast?

A **(public schools)** The changes we are making to the menu options will not affect the pricing of student meals. We project that operational costs will [decrease / stay the same].

Q Will these menus comply with federal nutrition mandates?
(public schools)

A The changes we are making to the menu are in full compliance with the USDA's nutrition mandates for public schools and will, in fact, meet a higher standard of healthfulness than those set by the USDA. **Specifically, we are further reducing sodium, saturated fats, and processed meats while we increase the amount of legumes, vegetables, and 100% whole grains.**

Q How will this affect the price of lunch and breakfast?

A **(price variable)** We expect that the changes we are making to the menu options [will not affect / will decrease] the average cost per meal, which may or may not translate to lower consumer prices. On average, meals centered on plant-based proteins will not increase the cost of those meals.





STAFF TRAINING

While Balanced is unable at this time to provide substantive hands-on training to kitchen staff, **we will connect you with the resources your staff may need to successfully implement menu changes.**

On the following pages is a compilation of organizations that provide trainings and other resources.

HANDS-ON TRAINING

HSUS Forward Food

www.forwardfood.org

Chef Ann Foundation

www.chefannfoundation.org

Coalition for Healthy School Food

<https://www.healthyschoolfood.org>

Chef Annette - That Veggie Gurl

<https://linktr.ee/thatveggiegurl>

ONLINE COURSES

Rouxbe Online Culinary School

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Plant-Based Cooking Course

<https://rouxbe.com/cooking-courses/plant-based-cooking-level-1/details>

Plant-Based Certification Course

<https://rouxbe.com/plant-based-certification-course/>

Udemy

\$

Cook Real Food: How to Make Simple Plant-Based Meals

<https://www.udemy.com/cook-real-food/>

Healthy Families: Nutrition, Plant-based cooking, and more

<https://www.udemy.com/healthy-families-nutrition-cooking/>

Forks Over Knives

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Plant-Based Cooking With Confidence


<https://www.forksoverknives.com/cooking-course>

Coursera & Stanford

\$\$

Child Nutrition and Cooking

<https://www.coursera.org/learn/childnutrition>



Quick tip

Below you'll find some sample language you can use to communicate operational changes to you staff and prime them for any expected changes to their roles and functions.

Our nation's public health is in a crisis, and ultimately, **this crisis is linked to what we are eating on a day-to-day basis.** As a food service team that cares about every single one of our loyal customers we have a responsibility to provide tasty meals that also promote health, well-being, productivity, and longevity.

That's why, over the course of the next year, we will be making a number of innovative and industry-forward improvements to our food service in an effort to provide healthier entrees to everyone we serve. We will be discontinuing (or reducing) 15-20% of our usual meal items and replacing them with (or adding) healthier options that feature plant-based proteins and produce.

This will involve formulating, testing, and serving exciting and delicious new recipes that contain more vegetables and beans and less fat, cholesterol, and salt. These reasonable and straightforward changes will help expose our customers to healthier meal patterns and will encourage more balanced eating.

Most importantly, it will help to prevent and reverse diet-related diseases.

You are probably wondering how this will affect your role within our food service operations. The changes we make to the menus will only affect a small percentage of the overall operations, and they may present you the opportunity to acquire new kitchen skills that will benefit you both in your career and in your personal life. Any necessary training will take place prior to implementation of changes and will take place during regular work hours.

In these trainings you may find the opportunity to learn more about the connection between nutrition and health, knife skills and food prep skills, healthy cooking techniques and modifications to recipes, and more balanced meal assembly.

In general, you'll want to highlight the opportunity to acquire new skills and keep up with growing trends in food service; that balanced menus are inclusive of diverse customers and thus improve overall satisfaction; that making health-conscious choices accessible is a responsibility your institution takes seriously; and that the skills acquired through trainings will add value to the personal and professional lives of your staff.



Implementing Menu Changes & Getting Feedback

In this final stage—after the necessary preparation, testing, and training—your team will implement the inaugural changes to the menus in accordance with the action plan.

Together, we can help you monitor the uptake from students indirectly through sales and directly through solicited feedback. Feedback can be gathered at multiple time-points, such as prior to implementation, one month post-implementation, and during taste-testing throughout a period of recipe development and sampling.





YOU'VE BALANCED YOUR MENUS, NOW WHAT?

How to market your menu improvements effectively

We know that the technical changes associated with improving your menus are only part of the process—and likely the part you're most looking forward to! However, marketing these improvements and successfully investing your customers in these changes might feel overwhelming or challenging.

In an effort to make the menu improvements a seamless, stress-free process, we've done most of the work for you, and we've designed many of the tools and resources you'll need. Combining research-backed behavior change strategies and innovative food-marketing techniques, we put together a list of best-practices, tips, and tricks to help simplify the process for everyone. So you can get back to what you do best—ensuring those you serve are provided a quality meal they'll enjoy!

We've broken up the strategies for marketing your menu improvements into five sections. While these sections can be used independently, they are typically most effective when used in combination.

The five strategies are:

- **Stealth Health**
- **Choice Architecture**
- **Watch Your Language**
- **Make Healthy Eating Cool**
- **Highlight the Impact**

Strategy 1: Stealth Health

In many cases, the improvements your team makes to the menus won't need to be promoted at all because the changes won't impact the flavor or quality of the foods you serve. Perhaps some changes, simply by virtue of their being new, might feel like they should be promoted, but that's not always the case and could even backfire.

Stealth health improvements can be made without fanfare and without impacting the overall experience of your customers.



For example, let's say you reduce or replace some amount of meat in a chili dish. Subtle changes to the menu from "Beef Chili" to "Hearty Chili," or even simply calling the improved dish "Chili," are almost certain to go unnoticed.

Other stealth health changes could include:

Replacing unhealthy salad bar toppings like bacon with sunflower seeds or crunchy chickpeas, and reducing the number of cream-based dressings.

Switching to 100% whole grain products instead of whole-grain rich (51-99%).

Using plant-based milks or an egg replacement like aquafaba in a recipe that calls for dairy or traditional eggs.

Reducing the portion size of animal products and processed food items.

Limiting the variety of toppings at a deli or pizza bar. Instead of Meat Lovers, Pepperoni, and Sausage pizza, replace one with a veggie option. There will still be two pizzas with meat options, but a third, meatless option will encourage more people to make a healthier choice.

The same applies to processed deli meats. Swap turkey slices for avocado or hummus and you're improving the healthfulness of 1/3rd of the toppings offered!

Many other subtle changes we can help you design!

Strategy 2: Choice Architecture

In the same way limiting or redesigning the contents of familiar meals works to encourage healthier options, so does choice architecture. **By designing your food environment to encourage specific choices, your team helps promote a culture of healthfulness.**

Similarly to stealth health, completely removing less healthy choices all at once is unlikely to be an effective strategy. But when food choice architecture makes the healthier choice easier to access and more appealing in sight, description, and convenience, it becomes an excellent means of encouraging habits that promote life-long health.

Examples of choice architecture in action:

- Make the healthiest dish the “Main” or “Featured dish”
 - Display it most prominently on the menu
 - Decorate a menu-board with this dish as the featured item
- Don’t relegate healthier options to a different section of the menu. Integrate the items into the main menu.
- Ensure the healthiest dish is the easiest to access and most prominently featured as customers move through your service line
- Require an additional step for customers who wish to order the less healthy options, i.e. instead of selecting the meal from a pre-prepared host of entrées, require customers to verbally ask a team member for the secondary, less healthy option
- Position the less healthy items at the farthest end of the line. Convenience and availability are excellent drivers of choice, and people often select one of the first dishes they encounter. Make the healthiest foods the first ones they see.
- Position the healthier food items in the physical path of your customers. If you want to increase salad bar sales, move the salad bar to a central location forcing all customers to pass it, not a corner or side wall that requires customers to go out of their way to access it.
- If possible, use plates that encourage customers to take the healthiest ratio of each food group. Larger plate for salad bars or plant-based items, smaller plates for food items like chicken nuggets, french fries, and pizza. Alternately, using a lunch tray, teach customers to fill the largest compartment with the healthiest items and reserve the smaller compartments for foods that should be limited.
- Serve unhealthy foods in half-portion sizes and healthier items in full. One example is to serve half a ham and cheese sandwich alongside a full-size bowl of vegetable soup.
- Many other changes we can help you design based on your unique situation and needs!



Strategy 3: Watch Your Language

For a long time, we've known people eat their meals twice: first with their eyes, then with their mouths. **Now, new research is showing that the ways in which food is described has an impact on the dining experience as well.** As a food industry professional, this is likely not news to you, and you probably already use this strategy in your work.

Here are a few of the most recent findings to be aware of:

- The descriptor “healthy” is likely to dissuade many customers from selecting a food item, as many people view the term as signaling deprivation or blandness. If children are your customers, this term is equally as meaningless, as few children are likely to be enticed by the healthfulness of a food item.
- **The terms “Vegan” and “Vegetarian” have a significant impact on the marketability of a product—and not in a good way.** Unless the majority of your customer base identifies as vegan or vegetarian, those labels do more harm than good.
- Use positive descriptive language to increase the value and desirability of a healthier food choice.
 - Instead of “healthy green beans” try “Fresh and zesty green beans”
- Replace vegetarian or vegan as a descriptor on dishes that don't absolutely require denotation. Hearty Lentil and Tomato Basil Marinara over Pasta for example, doesn't need the word vegetarian between hearty and lentil. If a vegetarian or vegan eater is curious, they'll ask, and for everyone else, there's no need to point out something that might dissuade them from the choice otherwise!
- For children, fun descriptors like “Superhero Spaghetti Squash,” “Totally Cool Tomato Soup,” and “The Queen's Three Bean Chili” are easier to get away with.
- For children, linking a food product with a beloved adult/influential person is also a strategy some people have shared anecdotally as effective. Ask teachers, school leaders, or others on campus if they have a preferred healthy menu item and incorporate that into the menu, e.g., “Mr. Thompson's Favorite Hummus Wrap.”
- Use signage or marketing materials to highlight a healthy food item as a recommended choice:
 - “Lunchroom Pick of the Day,” “Principal Lawson Suggests...,” “Mr. Elliot Recommends...,” “Dr. Peterson's Lunch Recommendation,” “The Cardiology Team Suggests...”
- **Communicate value through words like “Premium,” “Featured,” “Seasonal,” “Fresh,” and “Local” when appropriate and authentic.** Make sure the promise of those terms matches the quality of the product customers are expecting. “Premium reheated fish sticks” is not the same as “Premium cauliflower steaks and winter harvest soup.”



Strategy 4: Make Healthy Eating Cool

Prosocial messaging—that is, **messaging that makes a person believe “everyone else is doing it”—is a powerful behavior change motivator.** Norms are influential, and people are motivated to maintain a positive, valued identity. Good thing for us, it’s easy to make that happen.

On your menus, in your conversations, and/or on any promotional materials you develop, it’s easy to use prosocial messaging, and more and more food service professionals are doing just that to increase their sales.

**So, what does prosocial messaging sound like?
Here are some examples:**

- More people are choosing the quinoa bowl than ever before!
- We know you and your classmates love to eat the veggie soup on cold winter days.
- Lots of people pick the chickpea curry when they want energy for later!
- Since its debut, the veggie pot-pie has only gotten more popular.
- More people are opting to swap their greasy burgers for fiber-rich bean burritos.

Prosocial messaging is especially powerful when you have an audience of customers who are likely to be influenced by the positive choices their peers are making.



Strategy 5: Highlight the Impact

A now notorious Frosted Mini-Wheats commercial from 2008 claimed eating the cereal boosted student attentiveness by 20%. Obviously, that was not the case and was, in fact, a blatant lie and a misrepresentation of data. But! It was effective at getting parents to purchase more cereal. Why? Because they, too, wanted that increased boost of attentiveness for their child.

And that commercial provided a valuable lesson for other companies marketing food products. **People want to know how their choices will positively impact them.** For those parents, the positive impact was the alleged improvement in their child's chances of academic success. For us, it is the very real reduction and prevention of disease and an increased sense of well-being for the people and families you serve.



So how can you apply this strategy to your food service? Here are some tips:

- Highlight the nutritional impact of swapping one food item for another.
- Choosing Jackfruit over Pork boosts your fiber intake by XX%.
- People who eat one plant-based lunch a week reduce their cholesterol intake by X% on average.
- Gather anecdotal evidence or testimonies.
- "When I picked the [healthy food item] I noticed a difference in the way I felt all afternoon. It was nice not to experience a slump at 3 o'clock."
- Jessica said it was easier to pay attention in class after eating [healthy food item].
- Derek said the Superhero Spaghetti gave him enough energy to play all recess.
- Collect and share survey data showing the positive impact on mood, energy, experience, etc., after a customer selected a healthier food option.

A woman with long brown hair is smiling and looking towards a man whose profile is visible on the right side of the frame. They are in a restaurant setting with warm lighting and other patrons in the background. A green semi-transparent box is overlaid on the lower half of the image, containing white text.

Like all change, your new and improved menu may take a while for your customers to get used to—and that's OK!

Trial-and-error is a normal part of this entire process, but we have no doubt marketing menu improvements is a skill you'll master in no time! With strategic messaging and promotion, not only will those you serve grow to love the food, you'll have the satisfaction of knowing you're helping them live healthier and live better.

USE DATA TO MAKE CHANGES

*Collecting and applying
feedback from the people you serve*

In this final stage—after the necessary preparation, testing, and training—your team will implement the inaugural changes to the menus in accordance with the action plan. **Together, we will monitor the uptake from your customers indirectly through sales and directly through solicited feedback.**

Feedback can be gathered at multiple time-points, such as prior to implementation, one month post-implementation, and during taste-testing throughout a period of recipe development and sampling. On the next page, we've provided a sample meal satisfaction survey as one example of how to gather these data.



Sample School Food Program Survey

What is your overall opinion of school breakfast?

(Choose only one)

I don't buy school breakfast

0 - Dislike a lot

1 - Dislike a little

2 - No opinion / don't like or dislike

3 - Like a little

4 - Like a lot

Please explain why you chose that answer.

If you don't buy school breakfast, why not?

(Can select more than one)

I don't know

I eat breakfast at home

I don't think I will like it

I've tried it before and know I don't like it

What is your overall opinion of school lunch?

(Choose only one)

I don't buy school lunch

0 - Dislike a lot

1 - Dislike a little

2 - No opinion / don't like or dislike

3 - Like a little

4 - Like a lot

Please explain why you chose that answer.

If you don't buy school lunch, why not? (Can select more than one)

I don't know

I bring my lunch from home

I don't think I will like it

I've tried it before and know I don't like it

What is your overall opinion of [item] ? (Choose only one)

0 - Dislike a lot

1 - Dislike a little

2 - No opinion / don't like or dislike

3 - Like a little

4 - Like a lot

Please explain why you chose that answer.



This is just an example. All surveys can be custom designed to meet your program's needs. Considerations like customer base, location, institution, literacy level, age, etc., will be taken into account when we partner to design the survey.



Given feedback from surveys and sales data, the action plan, menus, and/or promotional materials may need to be adjusted. No decision need be final, and maintaining a certain amount of flexibility is a good way to ensure that, at any point in this process, we are not locked into a decision that will hurt your department's bottom line or cause a significant loss of business.



After changes have been implemented, business has stabilized, and all stakeholders have found value and benefit in the new menus, our team at Balanced will continue to be at your disposal in a consultancy capacity. At any time, we are glad to hold one-on-one meetings or make ourselves available for group trainings, as needed.

We are extraordinarily grateful for the partnership and responsibility with which you have entrusted us, and we are **even more thankful for your commitment to the health and well-being of those who depend on the food service your team provides!** In your resolve to foster better public health, you have created new possibilities for individuals and families who rely on your institution's facilities—the possibility to establish life-long healthy habits, the possibility of greater success and achievement, and the possibility for more people to live a life free of debilitating diet-related disease.

On behalf of your constituents **who may not yet fully appreciate all the hard work you do behind the scenes for their benefit**, we thank you for your willingness to lead, to act, and to innovate in the face of a dire health crisis that at times feels undefeatable. We know this process can be difficult, thankless, and overwhelming, which is why we pledge our continued support to you and your institution, and we know that the future will be brighter for so many as a result of the collaboration you were willing to undertake with us.

Thank You!



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