Balanced Menu

REPORT CARD

SUMMARY

Hawaii DOE menus succeed in offering adequate servings of red-orange and dark green vegetables each week. However, the menus fail to offer on a daily basis 100% whole grains, legumes, fresh fruit, diverse vegetables, and meatless meals centered around plant proteins. In addition, the menus should restrict high-cholesterol foods like red meat and eliminate processed meats, and water and non-dairy alternatives to milk should be advertised on the menus. In accordance with these findings, the menus at Hawaii DOE earn an "F" score.

STRENGTHS

Red-orange and dark green leafy vegetables offered regularly

AREAS FOR IMPROVEMENT

Restrict high-cholesterol foods like red meat and eggs

Ensure all classes of vegetables are served twice per week

Immediately remove processed meats (hot dogs, bacon, pepperoni, lunch meat)

Offer fresh fruit daily

Emphasize 100% whole grains and restrict ultra-processed products heavy in refined grains and sugars

Offer legumes in some form daily

Serve water or plant-based milk options alongside dairy

Offer warm, meatless entrees centered around plant proteins daily

Add portion sizes of all meats to the menu and improve menu transparency

BALANCING MENUS

Given that a significant and increasing proportion of children today show signs of metabolic syndrome, including high blood cholesterol, and diabetes or pre-diabetes, focusing menu reforms on three dietary components—saturated fat, cholesterol, and fiber—is a particularly high-impact way to improve food environments so that they will promote children's long-term health.

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. In addition to increasing risk for cardiovascular diseases, higher saturated fat intake is a significant risk factor for systemic inflammation, insulin resistance, and obesity.

Furthermore, the oxidation of dietary cholesterol, found only in animal products, 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.

Regrettably, less than 3% of American children meet or exceed the minimum adequate intake of fiber per day, which may constitute the most widespread nutrient deficiency in the United States. This profound lack of dietary fiber—found in phytonutrient-rich, whole plant foods but not highly refined foods or animal products—combined with general overconsumption of saturated fats and cholesterol is a clear indicator of the imbalance of our food environments and the need for change.

ENHANCING HEALTHFULNESS

School districts similar to Hawaii's Department of Education have improved the healthfulness of their menus by balancing their menus to feature more fresh, whole-food plant products and fewer meat and ultra-processed food products. An example of one simple change that accomplishes both is below. The following information assumes the serving size for each entree is 3 ounces. For a custom assessment, please contact us at **menus@balanced.org**.

Average nutrient values of meat-based dishes

7g	**Saturated Fat**	2g
50mg	**Cholesterol**	0mg
900mg	**Sodium**	600mg
2g	**Fiber**	17g

Average nutrient values of plant-based swap

Replacing one meat-based entree per week with a plant-based entree would:

Reduce Average Saturated Fat **14%**

Reduce Average Cholesterol **20%**

Reduce Average Sodium **7%**

Increase Average Fiber **150%**

Replacing one chocolate chip cookie dessert with 1/2 cup of strawberries would **eliminate**:

- **Saturated Fat** (2.3g to 0g)
- **Cholesterol** (11mg to 0mg)
- **Added Sugar** (4g to 0g)
- **Sodium** (55mg to 0mg)