

New Dietary Guidelines: Changes, Research & Clinical Applications for Cardiovascular Health

Objectives

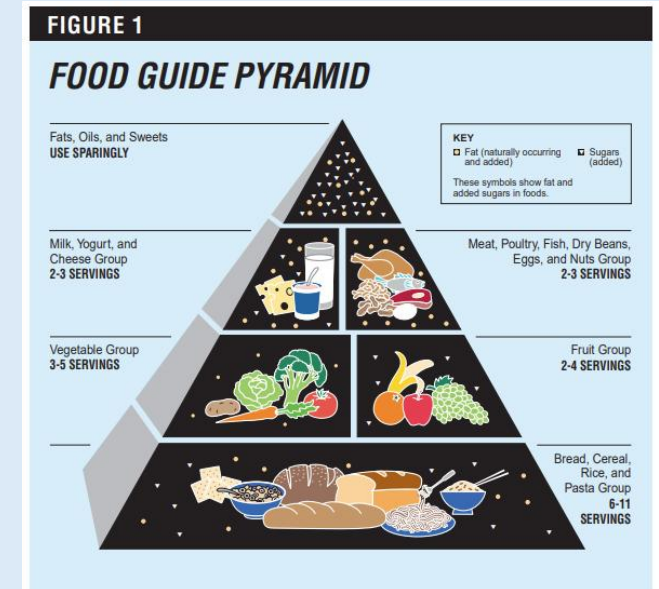
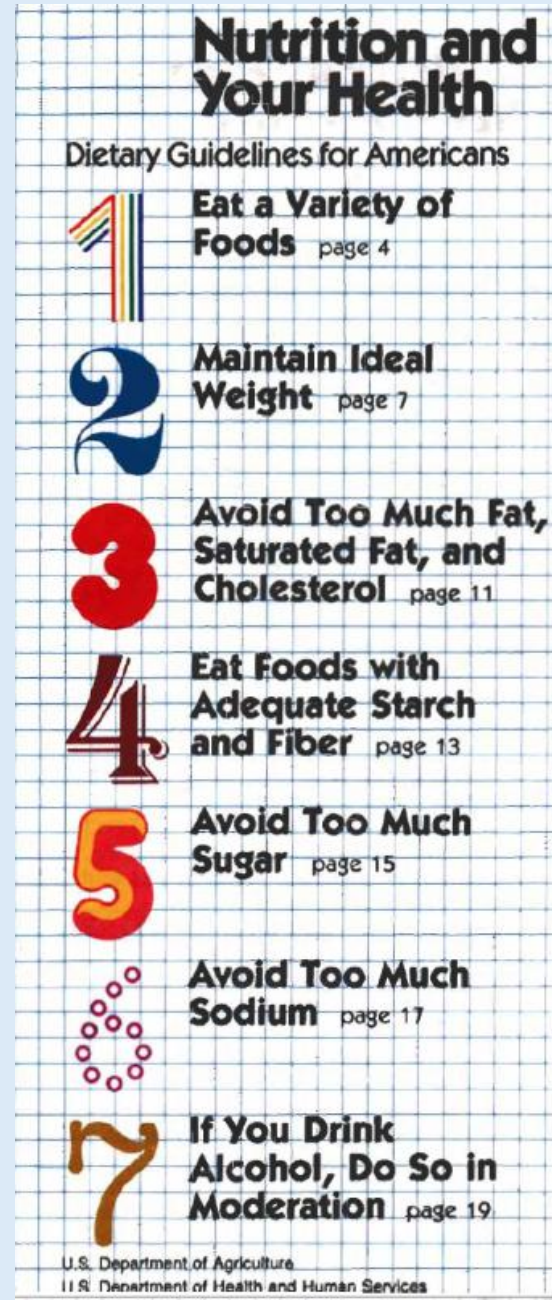
- Be able to identify changes between 2020 and 2025 dietary guidelines
- Evaluate the scientific evidence behind these recommendations
- Review current nutrition "trends" as they relate to the 2025 dietary guidelines
- Identify key recommendations for patients with cardiovascular disease or risk of cardiovascular disease

Disclosures:

- None

History of the Dietary Guidelines

- 1980: First official dietary guidelines
- 1992: Introduction of the Food Pyramid
- 2011: Introduction of MyPlate
- 2026: Inverted Food Pyramid



2025 Dietary Guidelines

What stayed the same?

- Emphasis on adequate fruits and vegetables
- Emphasis on fiber-rich whole grains
- Eat a variety of protein sources from plants or animals
- Saturated Fat recommendation
- Sodium recommendation



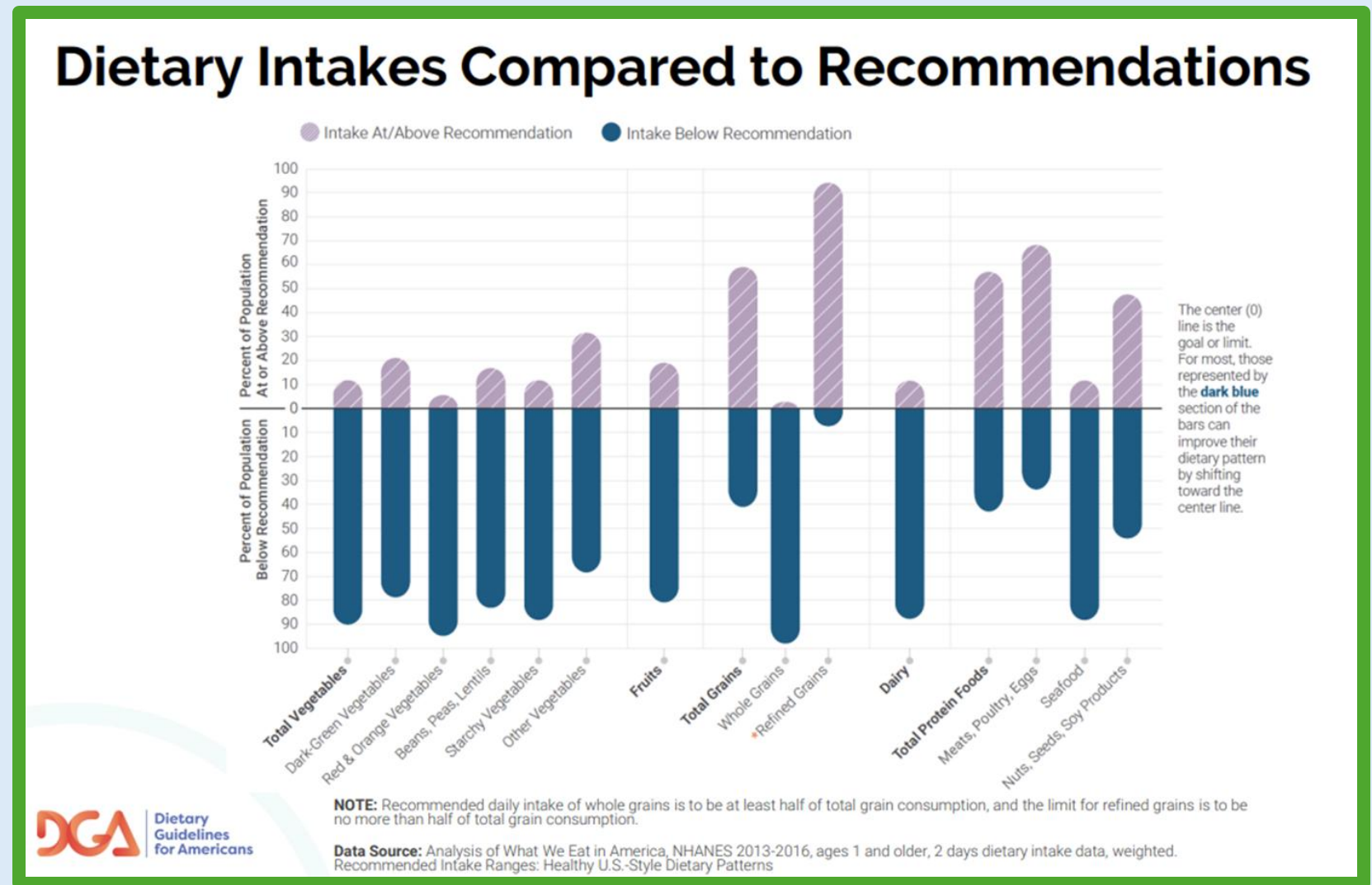
2025 Dietary Guidelines

What changed?

- “Real Food” messaging
 - Highly processed foods mentioned
- Protein Recommendations
- Messaging around fats
- Decrease in added sugar recommendation
- Alcohol limits removed



Vegetables & Fruits



- Recommendation is unchanged:
 - 3 cups of vegetables, 2 cups fruit for adults
- 10% of Americans get their recommended intake of vegetables, 12% for fruit

Vegetables & Fruits – Practical implications

- Goal of perfection muddies the waters on getting enough produce
- Frozen and no-salt-added or no-sugar-added canned options are nutritionally dense and last longer than fresh
- Misinformation about organic vs conventional can discourage patients

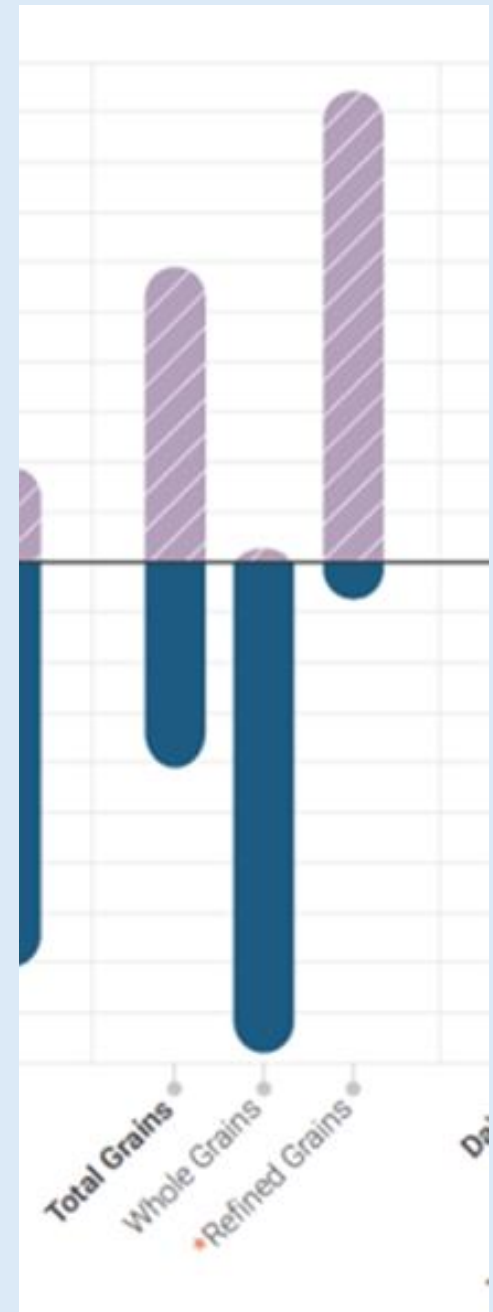


Fiber-Rich Whole Grains

- 98% of Americans fall below the recommendation for whole grains

Focus on Whole Grains

- + Prioritize fiber-rich whole grains.
- + Significantly reduce the consumption of highly processed, refined carbohydrates, such as white bread, ready-to-eat or packaged breakfast options, flour tortillas, and crackers.
- + Whole grains serving goals: 2–4 servings per day, adjusting as needed based on your individual caloric requirements.



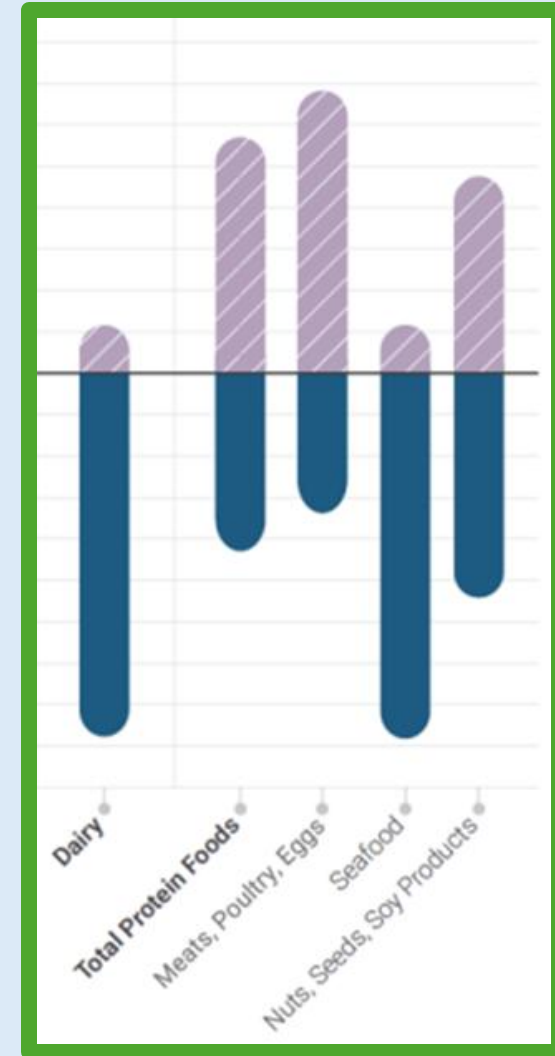
Fiber-Rich Whole Grains – Practical Implications

- Encourage choosing whole grains whenever possible
 - Whole Wheat Bread
 - Whole Grain Bread
 - Brown Rice/Wild Rice
 - Quinoa
 - Rye
 - Millet
- Whole Grain Council Stamp



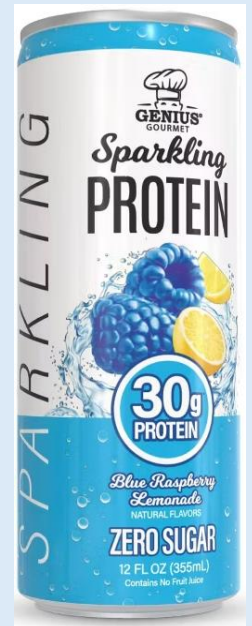
Protein

- Protein guideline change:
 - 2020: 0.8g/kg body weight
 - 200lb person = 73g/day
 - 2025: 1.2-1.6g/kg body weight
 - 200lb person = 109-145g/day
- Average American consumes 1.0g/kg currently
 - Food insecurity, elderly status, adolescent girls are more likely to be deficient



Protein – Practical Implications

- Patients to consider:
 - Elderly patients
 - More likely to be deficient in protein
 - Decreased appetite, food insecurity
 - GLP-1 users
 - Protein needs are likely higher, research ongoing
 - Recommendations range from 1.2g/kg-2.0g/kg
 - Kidney disease
 - May need lower protein
- Lean proteins should be emphasized – both from plant and animal sources



New Recommendation: Highly Processed Foods

- 2020 Guidelines: "limit foods with added sugars, added sodium, and added saturated fats"
- There is no “easy” definition of highly processed
- 55% of the average American’s calorie consumption comes from ultra-processed foods (as defined by the NOVA Classification)

- + Avoid highly processed packaged, prepared, ready-to-eat, or other foods that are salty or sweet, such as chips, cookies, and candy that have added sugars and sodium (salt). Instead, prioritize nutrient-dense foods and home-prepared meals. When dining out, choose nutrient-dense options.
- + Limit foods and beverages that include artificial flavors, petroleum-based dyes, artificial preservatives, and low-calorie non-nutritive sweeteners.
- + Avoid sugar-sweetened beverages, such as sodas, fruit drinks, and energy drinks.

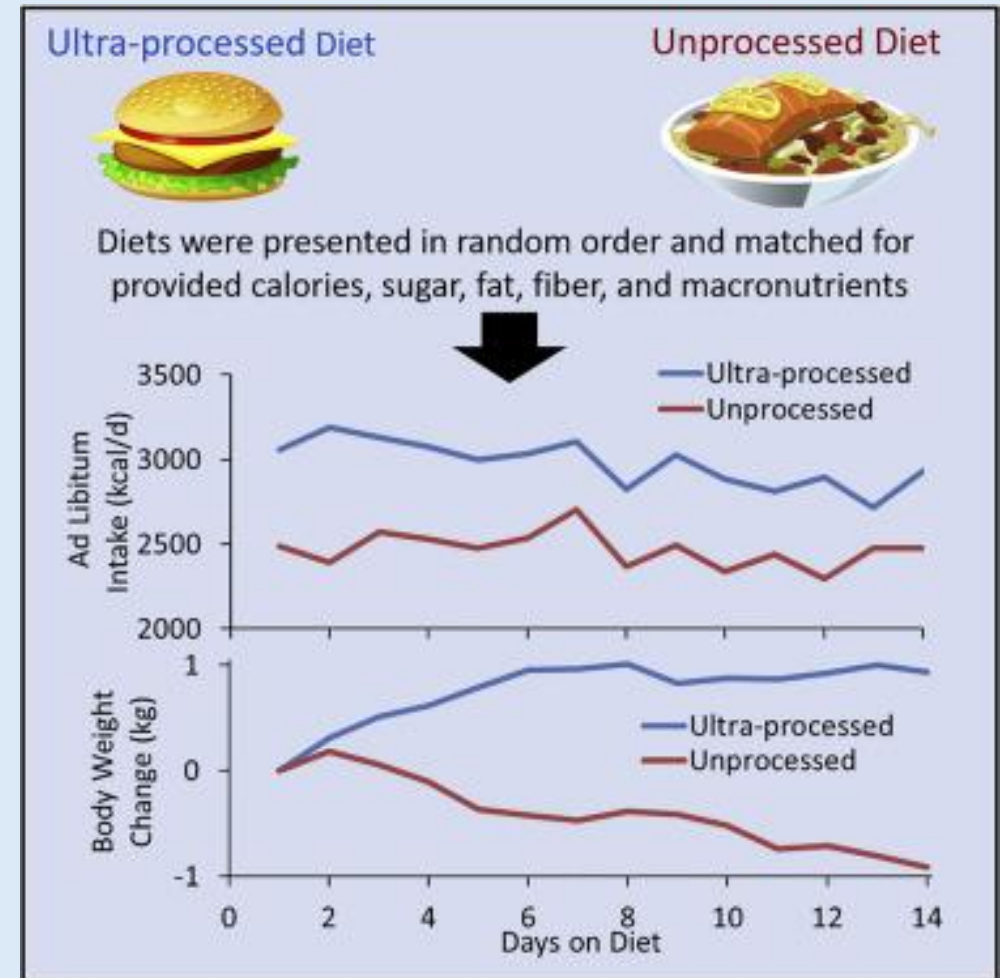
Highly Processed Foods

- Ultra-processed is defined by NOVA Classification from Brazil
 - Critics point out that many foods that are considered ultra-processed are healthy options like whole grain bread or low-fat Greek yogurt
- Most studies and statistics you see about ultra-processed foods are using this definition

NOVA			
GROUP 1	UNPROCESSED OR MINIMALLY PROCESSED FOODS		Unprocessed or minimally processed foods
GROUP 2	PROCESSED CULINARY INGREDIENTS		Processed culinary ingredients
GROUP 3	PROCESSED FOODS		Processed foods
GROUP 4	ULTRA-PROCESSED FOODS		Ultra-processed foods

Ultra-Processed – The Science

- Study participants were randomized to ultra-processed or whole foods in a metabolic ward study, instructed to eat “ad libitum”
 - Meals were matched for nutritional markers like calories, fat, protein
- Participants on the ultra-processed diet ate an average of 500 more calories per day than the whole food group
- Why?
 - Satiety? Food volume?
 - More research is being done



Highly Processed – Practical Implications

- We don't have a definition provided in the guidelines currently, NOVA classification is our best current tool (ultra-processed)
- The terminology from the dietary guidelines can be helpful to use with patients
- Encourage looking at added sugars, sodium and saturated fats on nutrition facts label

+ Avoid highly processed packaged, prepared, ready-to-eat, or other foods that are salty or sweet, such as chips, cookies, and candy that have added sugars and sodium (salt). Instead, prioritize nutrient-dense foods and home-prepared meals. When dining out, choose nutrient-dense options.

Fats:



Incorporate Healthy Fats

- + Healthy fats are plentiful in many whole foods, such as meats, poultry, eggs, omega-3-rich seafood, nuts, seeds, full-fat dairy, olives, and avocados.
- + When cooking with or adding fats to meals, prioritize oils with essential fatty acids, such as olive oil. Other options can include butter or beef tallow.
- + In general, saturated fat consumption should not exceed 10% of total daily calories. Significantly limiting highly processed foods will help meet this goal. More high-quality research is needed to determine which types of dietary fats best support long-term health.

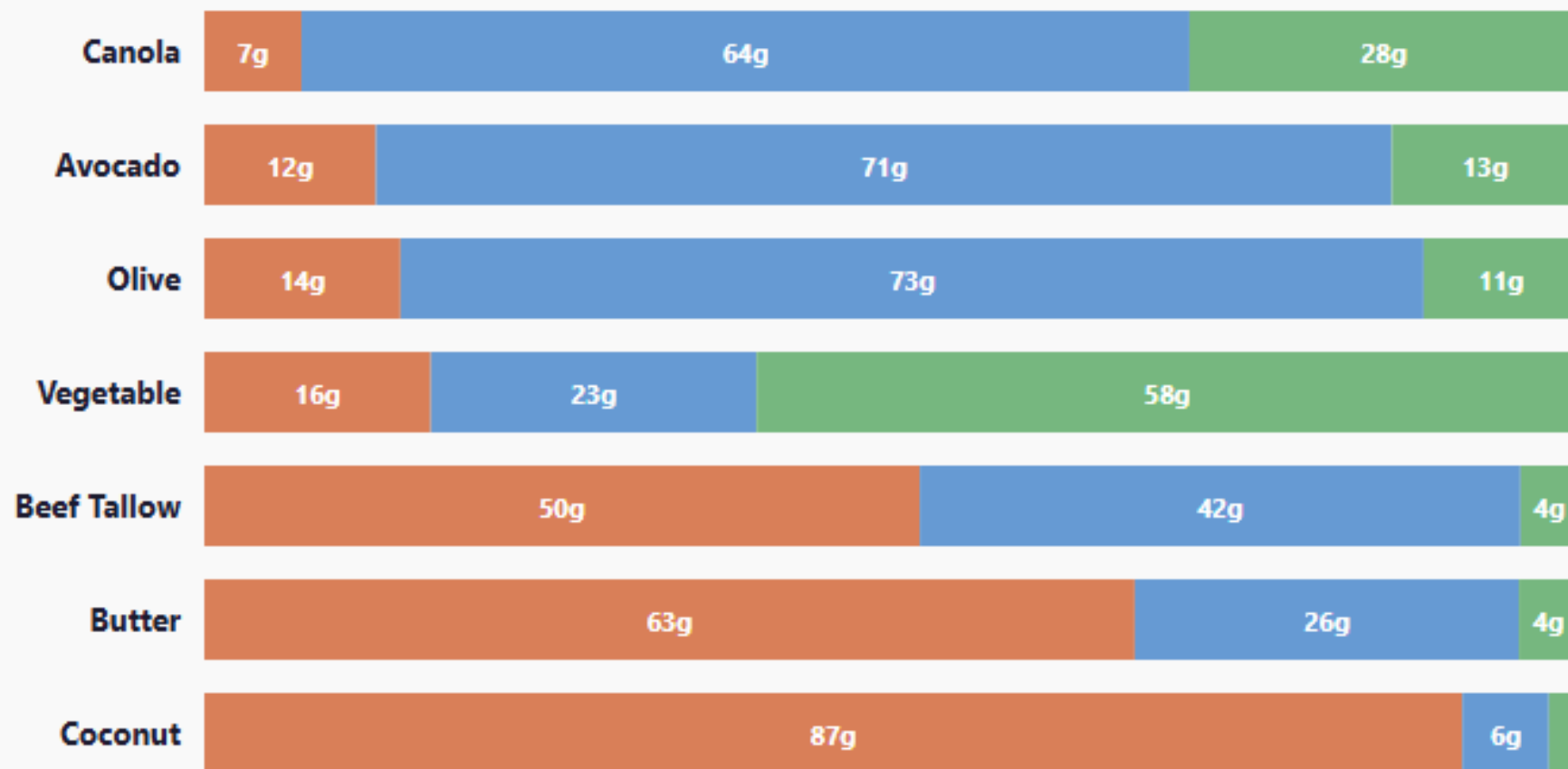
- Saturated Fat guidelines are unchanged - less than 10% of total calories
 - In line with American Heart Association, World Health Organization
 - Saturated fats – inhibit blood clearance and increase liver production of LDL cholesterol
- Incorporate Healthy Fats
 - Emphasized essential fatty acids (EFAs)
 - omega-3 and omega-6
 - "Other options include butter and beef tallow"
 - High in saturated fats, neither are good sources of EFAs



Fat Composition of Common Cooking Oils & Fats

Proportion of saturated, monounsaturated, and polyunsaturated fat

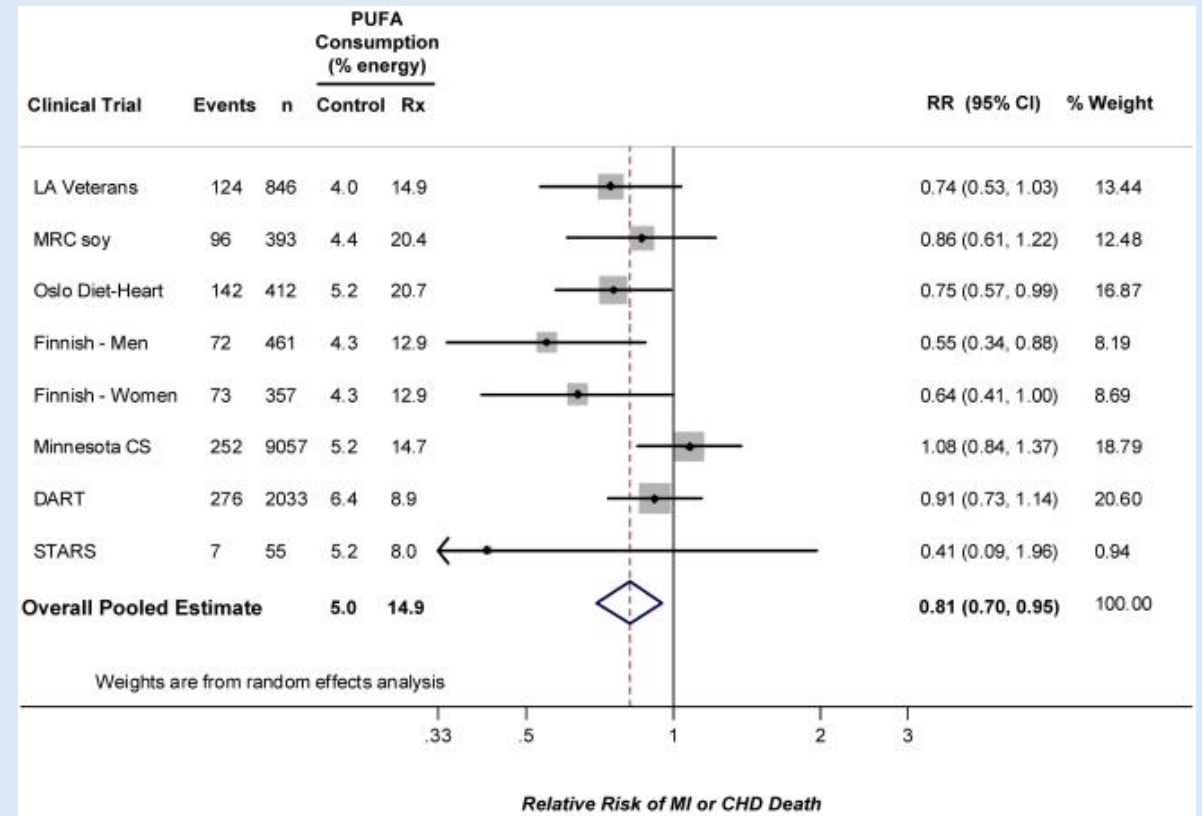
■ Saturated ■ Monounsaturated ■ Polyunsaturated



Sources: USDA FoodData Central, American Heart Association. Values are approximate.

Fats: Seed Oils

- Oils extracted from seeds
 - Often high in Polyunsaturated fatty acids (PUFAs)
- Trend: Seed oils are "bad" due to:
 - Inflammation
 - Truth: intake of PUFAs associated with lower inflammatory markers or neutral inflammatory markers
 - Increased risk of heart disease
 - Truth: RCTs replacing saturated fat with polyunsaturated fats showed reduction in risk of MI and CHD Death
- Vegetable oils are commonly seen in ultra-processed foods and increase calorie density, which can lead to overeating and less satiety overall



Fats – practical implications

- Saturated fats kept at <10% of total calories
 - 2000kcal/day = 21g
- Biggest sources in American diet:
 - High fat dairy, specifically cheese
 - Butter/beef tallow/lard for cooking
 - Processed meats (sausage, hot dogs)
 - Ultra-processed foods
- Seed oils do not increase risk of inflammation/CVD
 - Encourage cooking with unsaturated fats (“liquid at room temperature”)
 - Note: patients feel strongly about seed oils



Added Sugars

- 2020 guidelines: limit of 10% of total calories from added sugars
 - For 2000kcal = 50g
- 2025 guidelines: goal is zero added sugars, but limit is 10g per meal, 5g per snack
 - Note: 3 meals and 2 snacks = 40g
- Average American consumes 68g sugar per day
- Biggest concern: added sugars leave a gap in diet for missing items



Added Sugars – practical implications

- Added sugars are often added for taste and texture, and in most “ultra-processed foods”
- Fully eliminating added sugars is a huge challenge for most patients and can be discouraging
- Limiting added sugars should be recommended, can be found on nutrition label
 - 1 packet of sugar = 4g

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per serving	
Calories	230
	% Daily Value*
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 8mg	45%
Potassium 240mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	

(For educational purposes only. These labels do not meet the labeling requirements described in 21 CFR 101.9.)

Alcohol + Sodium

Alcohol

- 2020 Guideline:
 - No more than 2 drinks per day for men, 1 drink per day for women
- 2025 Guideline:

Limit Alcoholic Beverages

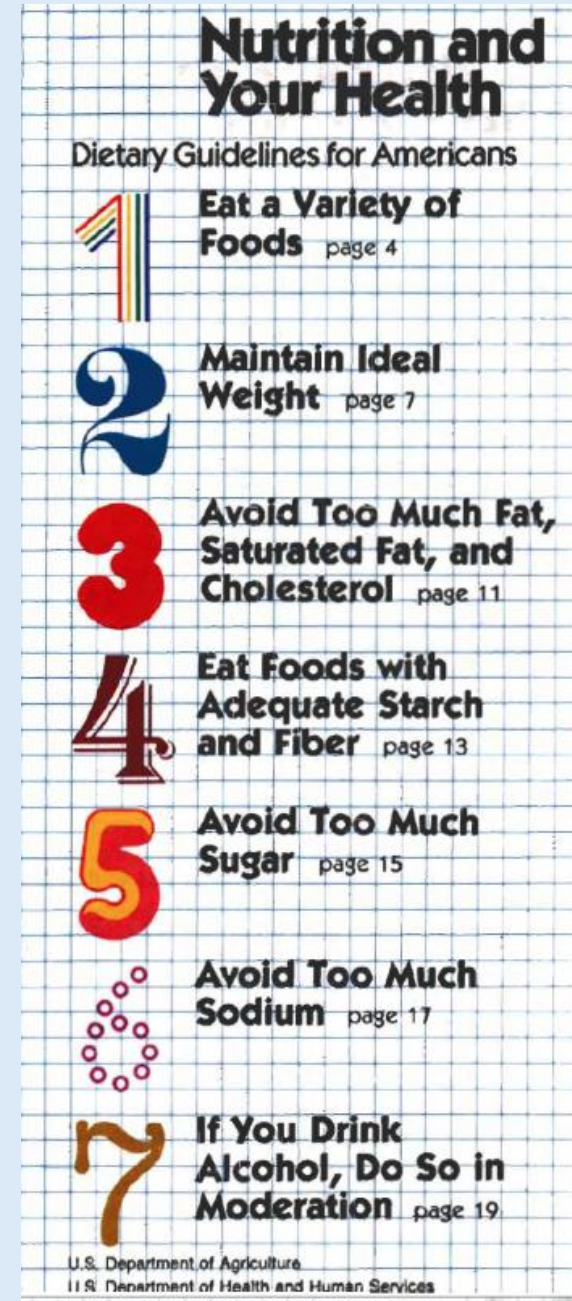
- + Consume less alcohol for better overall health.

Sodium

- 2300mg/day
 - Remains unchanged
- Note: Individuals with hypertension or prehypertension should aim for 1500mg/day
- Average American intake: 3500mg/day
- Main culprit: ultra-processed foods and restaurant meals

Conclusions

- Nutrition science has evolved, but the core principles remain
- Patients are getting a lot of messaging on protein, seed oils, and ultra-processed foods from social media, evidence-based nutrition is more important than ever
- Patients don't need to follow a perfect diet to make meaningful changes to their heart health – perfection is the enemy of progress!



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